Jan Frich, Magne Nylenna, eds.

The Harkness fellowship – the Norwegian experience

Michael 2025; 22: Supplement 34

Michael 2025; 22: Supplement 34

Publication Series of The Norwegian Medical Society

The Harkness House. Photo: The Commonwealth Fund

Jan Frich, Magne Nylenna, eds.

The Harkness fellowship – the Norwegian experience

Michael 2025; 22: Supplement 34

Michael is a journal published by the Norwegian Medical Society.

Michael is edited according to the prevailing rules in Norway (Redaktørplakaten).

Michael is an open access journal. A paper version and an electronic version are published simultaneously.

Michael is included in the Directory of Open Access Journals (DOAJ). Ordinary issues and supplement volumes are published under the Creative Commons licence CC BVY-ND 4.0.

Michael is member of the Committee on Publication Ethics (COPE) – www.publicationethics.org and is edited in accordance with its guidelines, as well as with the rules of the Vancouver Group (International Committee of Medical Journal Editors) – www.icmje.org.

Michael is member of Fagpressen (www.fagpressen.no) and Tidsskriftforeningen (www.tidsskriftforeningen.no)

Single issues, back numbers, and supplements can be ordered through the distributor Tekstallmenningen (https://tekstallmenningen.no/)

TRYKT I NORGE
NO - 1470

SVANEMERKET
Trykksak
2041 0379

ISBN 978-82-92871-70-6

ISSN 1893-9651

Det norske medicinske Selskab (The Norwegian Medical Society) 2025
P.O.Box 1152 Sentrum
NO-0107 Oslo, Norway

Design and graphic production: Aksell AS – aksell.no 2025

Contents

Reginald Williams, Molly FitzGerald

Foreword

Michael 2025; 22: 7–9.
doi: 10.56175/Michael.12576

For over a century, the Commonwealth Fund has worked to advance a singular mission: to enhance the common good. Today, that means promoting a high-performing health system that delivers better access, improved quality, and greater efficiency, especially for society's most vulnerable. We do this through rigorous research, evidence-based policy innovation, and one of our most enduring and proudest traditions – The Harkness Fellowships in Health Care Policy and Practice.

The Harkness Fellowships were originally founded with the bold and forward-looking vision to promote international understanding by offering emerging leaders the opportunity to study, travel, and grow through exposure to new systems and ideas.

That spirit endures today.

Since its founding in 1925, the Harkness Fellowships have served as a bridge between ideas, people, systems, and countries. Over the decades, the program has evolved to meet the challenges of the moment, from its early emphasis on transatlantic academic exchange, to its current focus on policy, practice, and health system innovation. Yet its core remains the same: to foster future leaders, build bridges across borders, and generate insights that improve health care for all.

Norway joined this global Fellowship network in 2010, thanks to the foundational support of Norwegian Knowledge Centre for Health Services, the Norwegian Institute of Public Health and the Research Council of Norway. Since then, 15 Norwegian fellows have taken part, including the current fellow, exploring timely issues including telemedicine, overdiagnosis, leadership, and equity in care, contributing to and improving health policy in both the U.S. and Norway. Their work has led to influential publications, actionable policy advice, and innovations now deployed in Norwegian health services.

The Harkness Fellowship is much more than a research opportunity – it is, as many alumni describe it, a "transformative" life experience. The program offers mid-career professionals a unique opportunity to spend a year in the United States conducting policy-relevant research, working closely with leading mentors and institutions, and gaining insight into the complexities of the U.S. health system. Beyond the rigor of the work produced, we see first-hand how the fellowship cultivates enduring professional networks, cross-border friendships, and broadened perspectives that often reshapes careers and, by extension, health systems.

This volume details the work of Norwegian Harkness Fellows over the past 15 years. It reflects their deep commitment to learning, innovation, and cross-country engagement. It is a resource for future leaders and proof of the lasting impacts of international exchange.

It also reminds us of the crucial role that partners play in making this work possible. Our partnership with Norway is strong and valued. The steady support from our Norwegian partners and diligent work of the fellows they support prove a shared belief that international learning helps solve national challenges. As one fellow said, "True leadership lies in everyday actions – sharing knowledge, offering resources, and helping others shine."

As we mark the Harkness Fellowship centennial in 2025, we celebrate the program's history with a forward-looking view toward its continued relevance. In an era defined by seemingly insurmountable challenges and complexity, the need for cross-border learning is greater than ever. We hope this collection will inform, inspire, and guide future Harkness Fellows, and the broader community of people working to improve health across borders.

With thanks to all who contributed. We look forward to the work ahead.

Reginald Williams
rw@cmwf.org
The Commonwealth Fund
1 East 75th Street
New York, NY 10021
USA

Reginald Williams is Senior Vice President, International Health Policy and Practice Innovations, The Commonwealth Fund.

Molly FitzGerald
mf@cmwf.org
The Commonwealth Fund
1 East 75th Street
New York, NY 10021
USA

Molly FitzGerald is Director, Harkness Fellowship, The Commonwealth Fund.

**Jan Frich, Magne Nylenna, Kjetil Telle,
Signe Flottorp, John-Arne Røttingen**

The Norwegian Harkness-experience 2010–2025

Michael 2025; 22: Supplement 34: 10–20.
doi: 10.56175/Michael.12577

The Harkness Fellowships, offered by The Commonwealth Fund, provide mid-career professionals from selected countries—including Norway—with a year-long opportunity to conduct health policy research in the U.S. The program aims to develop international leaders by fostering comparative research and collaboration across health systems. Fellows are placed at leading U.S. institutions, engage with mentors, participate in seminars, site visits, and policy briefings, and present their findings at a final seminar. Since Norway joined the program in 2010, 14 Norwegian fellows have completed the program, supported by the Norwegian Knowledge Centre for Health Services, the Norwegian Institute of Public Health and the Research Council of Norway.

The Norwegian fellows have explored a wide range of topics including equity, overdiagnosis, telemedicine, and care for chronic conditions. They report that the program fosters both professional and personal development, new research collaborations, and lasting networks. Their contributions have enriched Norwegian health services research and policy through publications, policy advice, and policy and practice innovation. The program is considered a valuable source of international perspective and leadership development for improving health care systems.

The Harkness Fellowships in Health Care Policy and Practice, offered by The Commonwealth Fund, is a prestigious, year-long fellowship program designed for midcareer professionals — policymakers, researchers, clinical leaders, health care executives, and journalists — from selected countries, including Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Singapore, and the United Kingdom (1).

The Harkness Fellowships are named after Edward Stephen Harkness (1874–1940) (fig. 1), an American philanthropist who established the fellowships in 1925. He was the son of Anna Maria Harkness (1837–1926)

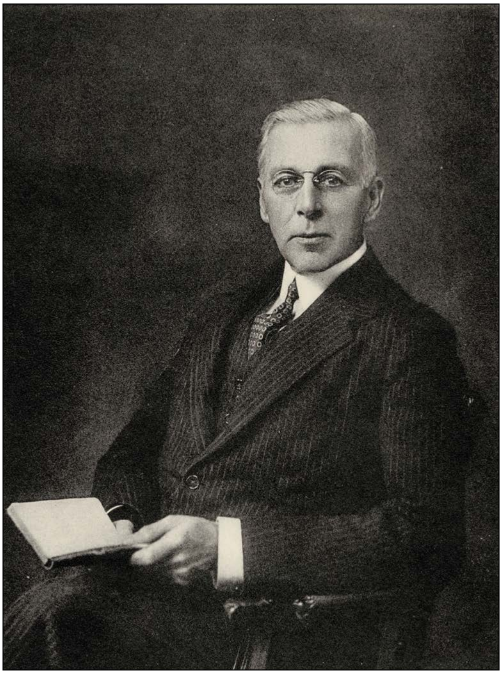


Figure 1. Edward Stephen Harkness (1874–1940)

Figure 2. Anna Maria Harkness (1837–1926)

(fig. 2) and Stephen Vanderburgh Harkness (1818–1888), an American businessman based in Cleveland, Ohio. Anna M. Harkness founded the Commonwealth Fund in 1918. The fellowships were first offered in 1925 and envisioned as a "reverse Rhodes Scholarship" with a broader societal scope (2).

Today, the Commonwealth Fund's mission is "to promote a high-performing, equitable health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including people of color, people with low income, and those who are uninsured" (3). Since 1997, the fellowship program has focused exclusively on health care policy and practice, and it remains a flagship of the Fund's International Health Policy and Practice Innovations program.

Norwegian health care

Norway is a Nordic country with a population of approximately 5,6 million, known for its strong welfare state and commitment to social equity. Its tax-based government funded health care system is a central pillar of this model, emphasizing universal access, equity, and high quality of care. Norway provides universal health care coverage to all residents through membership of the National Insurance Scheme (4). Four regional health authorities, owned by the central government, are responsible for provision of specialist health services for the population in their region, while primary health care is the responsibility of 357 municipalities.

Like many other developed countries, Norway faces challenges such as an aging population, waiting times for elective procedures, workforce shortages, and balancing cost containment with innovation and quality. The Norwegian health care system is often ranked in the top tier in the Commonwealth Fund's international survey of health systems (5) and in other international comparisons of system performance like OECD's international comparative report *Health at a Glance* (6). Coordination of care across and within service levels continues to be a challenge due to lack of an integrated electronic health record, lack of organizational structures, different financing models and regulatory frameworks across the two levels of the health care system.

Since the Norwegian health care system is predominantly publicly funded, most hospitals are owned by the government, and most municipalities are small in population size, exposure to integrated and digitally mature health systems in other countries may model and inspire new ways of delivering health services. The last 15 years, Norway's participation in the Harkness fellowship program has been important for exchange of ideas and inspiration to how health care systems and health care delivery can be improved.

The Harkness Fellowship program

The aim of the Harkness Fellowship program is to develop international leaders in health policy and practice by providing them with the opportunity to conduct comparative research on critical health care issues in the U.S. Applicants must demonstrate a commitment to improving health care systems, especially for vulnerable populations, and have a strong track record in policy, research, or leadership. The Commonwealth Fund appoints up to 13 Harkness Fellows each year. The typical current annual distribution is one each from Australia, Canada, and France; two each from Germany and the Netherlands; one each from New Zealand and Norway; and four from the United Kingdom.

Fellows are placed at leading U.S. universities and health care organizations. Each fellow is paired with one or more mentors based in the U.S. who offers mentoring, guidance, technical expertise, and provides access to networks and data.

Harkness Fellows build a strong international network of health policy experts, and during their year in the U.S. they are expected to produce policy-relevant outputs such as journal articles, policy briefs, or multimedia content.

Fellows usually start their year in the U.S. in August or September. The fellowship program starts with an orientation week held at the Commonwealth Fund headquarters in New York City. During this week Harkness fellows are introduced to each other and to the Commonwealth Fund, and they learn about current health care delivery system and health policy issues in the U.S.

The fellow program contains regular seminars, site visits to health care organizations and agencies, and policy briefings. Fellows are given the opportunities to meet with policy leaders, academics, and health care professionals who are involved in innovation and improvement of health care service delivery. During a week in Washington D.C. fellows get a firsthand understanding of how health policy is developed and implemented in the U.S. Fellows meet with members of Congress, experts in Medicare and Medicaid policy, leaders of political advocacy organizations, and political strategists. The year is closed with a final reporting seminar where fellows present their findings. The Fund arranges dinners for family members and partners.

During the final lunch, all the fellows are asked to share their most important experiences from their stay. One question that everyone is asked during this round is the following: If you were to fall ill and need medical care, after having observed the U.S. healthcare system for about a year, would you choose to be treated here or in your home country? Interestingly, as far as is known, all Norwegian fellows have chosen the Norwegian healthcare system over those in the U.S.

Norwegian Harkness Fellows

John-Arne Røttingen, who served as Chief Executive of the Norwegian Knowledge Centre for the Health Services (Nasjonalt kunnskapssenter for helsetjenesten) from 2004 to 2011, initiated Norwegian participation in the Harkness Fellowship program from 2010. The Norwegian Knowledge Centre for the Health Services served as the Norwegian collaborating institution for The Commonwealth Fund until 2016, when the Knowledge Centre was incorporated into The Norwegian Institute of Public Health. Since then, The Norwegian Institute of Public Health has been the responsible collaborating institution in Norway. The Research Council of Norway has been a reliable sponsor of the Norwegian Harkness fellowship program from the onset in 2010 throughout the last 15 years.

Applications for the fellowship has each year been openly invited from “skilled professionals in the healthcare sector who are mid-career and are engaged in improving the healthcare system through analysis and research, as well as leadership”. The target group for the fellowship has been researchers, leaders or journalists who are in a phase of their professional development where the experiences gained from such a scholarship can have significant value for their future work.

The selection process has been managed by a Norwegian Harkness Selection Committee in cooperation with the Commonwealth Fund. The selection Committee has included representatives from the Norwegian Knowledge Centre for the Health Services, the Norwegian Institute of Public Health (from 2016), the chairs of the Board for the Research Programme on Health and Care Services (until 2015) and the Board of the Health, Care and Welfare Services Research (HELSEVEL) (until 2024) at the Norwegian Research Council, and Norwegian experts on health care. Advertising for next year’s scholarship usually begins in the preceding spring, with an application deadline in November the year before. The committee may approach and nominate potential applicants.

The applications contain a statement of professional objectives, a curriculum vitae, four letters of reference, and examples of work products, such as journal articles, reports, or other pieces of writing. Candidates are also asked to include an outline of a research project of interest and relevance both to Norwegian and U.S. health care policy in their application. The last three years, the number of applicants has varied between three and four well-qualified professionals. During winter and springtime, applicants have been interviewed and a new fellow selected. The choice of placement and mentors has been administered by the Commonwealth Fund.

Except from the academic year 2020–2021, when the program was paused due to the COVID-19 pandemic, a Norwegian Harkness fellow has been selected each year since 2010. So far, 14 fellows, seven women and seven men from various Norwegian universities, colleges, research institutes, and agencies, have completed the program. They represent a diverse background from medicine, nursing, ethics and health economics (table 1).

Impact and experiences

In this book, 13 Norwegian Harkness fellows share their experiences and reflections. They were invited to describe their research projects, main findings, and how the project has had an impact nationally and internationally. Further, we invited them to share their thoughts on how the experiences and exposure to U.S. health care and health policy has had an impact careerwise. We also welcomed any reflections on future research or policy work to promote access, equity, and quality.

Table 1. Norwegian Harkness fellows' placements, projects and mentors.

Fellow (year) and placement	*Project title and mentor(s)*
Berit Bringedal (2010–2011) Harvard School of Public Health	**Project title:** *Should Personal Responsibility for Health Influence Access to Health Care? The Use of Wellness Incentives in U.S. Workplaces* **Mentors:** Professor Norman Daniels (Harvard School of Public Health). Professor and Director James Sabin (Harvard Pilgrim Health Care Ethics Program, Harvard Medical School)
Atle Fretheim (2011–2012) Harvard Medical School	**Project title:** *A Comparative Study of Methods for Evaluating Health System Interventions* **Mentor:** Professor Stephen Soumerai (Harvard Medical School)
Hans Olav Melberg (2012–2013) University of Pennsylvania	**Project title:** *Integrated Care and Incentives: Who Are the Most Expensive Patients and What Does It Tell Us About the Health Care System?* **Mentor:** Professor Mark Pauly (Wharton School University of Pennsylvania)
Jan Frich (2013–2014) **Placement:** Yale School of Public Health	**Project title:** *Building Capacity for Clinical Leadership* **Mentor:** Professor Elizabeth H. Bradley (Yale School of Public Health)
Bjørn Hofmann (2014–2015) Dartmouth Institute for Health Policy and Clinical Practice, Dartmouth College	**Project title:** *Avoiding Over-Diagnosis as a Strategy for a High Performing Health Care System* **Mentors:** Professor Glyn Elwyn (Dartmouth College) and Dr. H. Gilbert Welch (Dartmouth College)
Meetali Kakad (2015–2016) Brigham and Women's Hospital	**Project title:** *Using Big Data to Transform Healthcare Outcomes: Lessons from the Field* **Mentor:** David Bates (Brigham and Women's Hospital and Harvard School of Public Health)
Birgitte Graverholt (2016–2017) Brown University School of Public Health	**Project title:** *Reducing Hospitalizations from Nursing Homes* **Mentor:** Professor Vincent Mor (Brown University School of Public Health)
Marianne Storm (2017–2018) The Dartmouth Institute of Health Policy and Clinical Practice, Dartmouth College	**Project title:** *Quality in the Coordination and Continuity of Mental Healthcare* **Mentors:** Professor and Director Stephen (The Dartmouth Institute for Health Policy and Clinical Practice), Professor Martha L. Bruce (Geisel School of Medicine)
Unni Gopinathan (2018–2019) Department of Population Medicine, Harvard Pilgrim Health Care Institute and Harvard Medical School	**Project title:** *Driving Leadership and Priority for Prevention and Population Health: Impact and Experiences from Health Policy and Organizational Models in the United States* **Mentors:** Director Frank Wharam (Harvard Medical School) and Clinical Professor / Adjunct Professor Roberta Goldman (Brown University / Harvard T.H. Chan School of Public Health)

Fellow (year) and placement	*Project title and mentor(s)*
Christer Mjåset (2019–2020) Harvard T.H. Chan School of Public Health and Harvard Business School	**Project title:** *From Volume to Value in Spinal Surgery: What Promotes Successful Uptake of Value-Based Health Care?* **Mentors:** Professor Meredith Rosenthal (Harvard T.H. Chan School of Public Health) and Chief Medical Officer Thomas H. Lee (Press Ganey Associates)
Ane-Kristin Finbråten (2020–2021) Weill Cornell Medical College	**Project title:** *Progress and Challenges in Eliminating Hepatitis C Virus by 2030: A Study of Two Health Care Models and the Impact of the COVID-19 Pandemic* **Mentors:** Professor Bruce Schackman (Weill Cornell Medical College), Assistant Professor Shashi Kapadia, (Weill Cornell Medicine), and Assistant Professor Benjamin Eckhardt (New York University Grossman School of Medicine)
Hanne Marie Rostad (2022–2023) Brown University School of Public Health	**Project title:** *Disparities in Dementia: The Effects of Nursing Home Quality on the Short- and Long-Term Outcomes of People with Dementia* **Mentors:** Assistant Professor Elizabeth White (Brown University School of Public Health) and Professor Vincent Mor (Brown University School of Public Health)
Iselin Dahlen Syversen (2023–2024) Stanford University	**Project title:** *Towards Equitable Access to Medicines Through Increased Transparency in the Pharmaceutical Market* **Mentors:** Professor Kevin Schulman, (Stanford University School of Medicine) and Professor Aaron Kesselheim (Harvard Medical School and Brigham and Women's Hospital)
Jacob Jorem (2024–2025) Harvard Medical School, and Columbia University Mailman School of Public Health	**Project title:** *Geographic Reach of Mental Health Specialists Adopting Telemedicine and Impact of Implementing Medicaid-Funded Mobile Crisis Services on Beneficiaries with Mental Health Conditions* **Mentors:** Professor Haiden Huskamp (Harvard Medical School) and Professor Michael Sparer (Columbia University Mailman School of Public Health)

Norwegian Harkness fellows have been placed at different institutions, including Harvard University, University of Pennsylvania, Yale University, Dartmouth College, Brown University, Cornell University, and Stanford. The fellows' projects cover a wide range of topics, including health care expenditure and financing models, priority setting, methods for evaluating heath policies, leadership development, over-diagnosis, use of "bid data", coordination of care, value-based health care, innovative health care delivery models for dementia and other chronic conditions, price negotiations for prescription drugs, and the uptake of telemedicine in mental health care (7–19). Several projects explicitly address health disparities, equity, and access to health care.

A salient feature of U.S. that differs significantly from Norway is the state-by-state variation that works as "a "laboratory" for research using comparative methods", as Unni Gopinathan puts it (14). The Norwegian fellows have learned how different regulatory frameworks, delivery systems, and financing models operate, and these insights are particularly relevant for the Norwegian health care systems with less variation.

The fellows have shared their insights and findings through presentations at conferences and meetings. Several fellows have contributed through policy advice and Norwegian government reports and White papers.

The impact of the Harkness Fellowship extends way beyond the research project. The fellows recount positive experiences of interacting with experts, academics, policy makers, and other fellows from around the world. Many fellows have made new professional contacts and have taken part in new research initiatives during or after their year in the U.S. Their accounts clearly show that new and lasting research collaborations have been formed.

Several fellows emphasize the personal development and leadership insights that the fellowship fostered, as Iselin Dalen Syversen puts it (18):

> "Reflecting on my fellowship year, I didn't just gain new knowledge and skills about disparities research—I acquired a whole new perspective on leadership. Before heading to the United States, I thought leadership was about big decisions and grand gestures, but I learned that true leadership lies in the everyday actions and interactions—sharing knowledge, offering resources, and helping others shine."

We would argue that the Norwegian participation in the Harkness Fellowships program, and the financial support from the Research Council of Norway, has benefited Norwegian health policy, health care and health services research. The Norwegian Fellows' accounts demonstrate that being exposed to the diversity of U.S. health care as a Harkness fellow nurtures curiosity, refines research and leadership skills, and provokes new ideas and questions. Further, Norwegian fellows return from the fellowship program with an international perspective, novel insights, research findings and an international network that represent steppingstones for improvement and innovation of health care services and health policy in Norway and internationally.

Literature

1. About the Harkness Fellowships. The Commonwealth Fund: https://www.commonwealthfund.org/about-harkness-fellowships 3.8.2025
2. Harkness Fellows, 1925–1997. The Commonwealth Fund. https://www.commonwealthfund.org/harkness-fellows-1925-1997 3.8.2025
3. About us. The Commonwealth Fund. https://www.commonwealthfund.org/about-us 3.8.2025

4. Norway. The Commonwealth Fund. https://www.commonwealthfund.org/international-health-policy-center/countries/norway 3.8.2025
5. *Mirror, Mirror 2021: Reflecting Poorly*. The Commonwealth Fund. https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly 3.8.2025
6. Health at a Glance. OECD. https://www.oecd.org/en/publications/serials/health-at-a-glance_g1gha65a.html 3.8.2025
7. Bringedal B. A Year at Harvard: my Harkness Fellowship experience. *Michael* 2025; 22: Supplement 34: 21–25.
8. Fretheim A. Evaluating health system interventions: a comparison of different methods. *Michael* 2025; 22: Supplement 34: 26–31.
9. Melberg HO. The difference between policy advice and research. *Michael* 2025; 22: Supplement 34: 32–35.
10. Frich J. Building capacity for clinical leadership. *Michael* 2025; 22 Supplement 34: 36–41.
11. Hofmann B. Avoiding medical over-activity as a strategy for improving the health care system. *Michael* 2025; 22: Supplement 34: 42–45.
12. Kakad M. Using predictive analytics to transform healthcare outcomes: lessons from the field. *Michael* 2025; 22: Supplement 34: 46–53.
13. Storm M. Coordinating health care for people with serious mental illness. *Michael* 2025; 22: Supplement 34: 54–59.
14. Gopinathan U. Understanding the impact of health reforms and insurance designs on population health: Lessons from the experimental laboratory of the United States. *Michael* 2025; 22: Supplement 34: 60–66.
15. Mjåset C. Bringing more value to patients – lessons from different health systems. *Michael* 2025; 22: Supplement 34: 67–72.
16. Finbråten A-K. There are no hard-to-reach patients – only hard-to-reach health care. *Michael* 2025; 22: Supplement 34: 73–78.
17. Rostad HM. No data, no justice: the need to study health disparities in municipal long-term care. *Michael* 2025; 22: Supplement 34: 79–84.
18. Syversen ID. A comparative analysis of international drug price negotiation frameworks. *Michael* 2025; 22: Supplement 34: 85–89.
19. Jorem J. Using telemedicine and mobile crisis teams to improve mental health care access: exploring U.S. policies and their relevance to Norway. *Michael* 2025; 22: Supplement 34: 90–96.

Jan Frich
jan.frich@medisin.uio.no
Institute of Health and Society
University of Oslo
Norway

Jan Frich is professor at University of Oslo and Chief Executive Officer of Central Norway Regional Health Authority. He was Harkness Fellow 2013–2014 and has been member of the Norwegian selection Committee for Harkness Fellowship in Health Policy and Practice since 2021.

Magne Nylenna
magne@nylenna.no
Institute of Health and Society
University of Oslo
Norway

Magne Nylenna is professor emeritus, University of Oslo, former director of the Norwegian Knowledge Center for Health Services (2011–2017), and Chairman of the Norwegian selection Committee for Harkness Fellowship in Health Policy and Practice 2011–2020

Kjetil Telle
kjte@fhi.no
The Norwegian Institute of Public Health
PO Box 4534 Nydalen
0404 Oslo
Norway

Kjetil Telle is Executive Director for the Division of Health Services at the Norwegian Institute of Public Health. He is the current Chair of the Norwegian selection Committee for Harkness Fellowship in Health Policy and Practice.

Signe Flottorp
signe.flottorp@fhi.no
The Norwegian Institute of Public Health
PO Box 4534 Nydalen
0404 Oslo
Norway

Signe Flottorp is Research Director at the Norwegian Institute of Public Health. She has been a member of the Norwegian selection Committee for Harkness Fellowship in Health Policy and Practice since the start in 2010, and the Chair of the Committee 2021–2023.

John-Arne Røttingen
john-arne@rottingen.no
Wellcome Trust
Gibbs Building
215 Euston Road
London NW1 2BE, UK

John-Arne Røttingen is CEO of Wellcome, London, UK. He initiated Norway's collaboration with the International Program of the Commonwealth Fund with its international survey of health systems and Harkness fellowships in 2009.

Berit Bringedal

A year at Harvard: My Harkness fellowship experience

Michael 2025; 22: 21–25.
doi: 10.56175/Michael.12578

In this paper, I reflect on my experiences as a Harkness Fellow at Harvard Medical School during 2010–2011. My project focused on prioritization and patient responsibility in the U.S. compared to Norway, in collaboration with my mentors, Norman Daniels and Jim Sabin.

Beyond my work at Harvard, I benefited from the Commonwealth Fund's engaging seminars, site visits, and meetings with leaders in healthcare and health policy. The fellowship provided me with broad insight into U.S. healthcare, expanded my professional network, offered memorable experiences beyond professional activities, and had a lasting impact on my future work.

In terms of publications, at least nine scientific articles directly resulted from my fellowship year.

I had the privilege of receiving the first Norwegian Harkness Fellowship in the 2010–2011 academic year. I had been interested in healthcare prioritization for several years and had experience in research and administration in this field. As with many issues at the intersection of politics and research, the field did not change rapidly, so I was glad to have the opportunity to learn something new and study a very different healthcare system up close. I wanted to continue working on issues related to prioritization and fair distribution.

I was particularly curious about how leaders in the American healthcare system thought about patients' lifestyles and their responsibility for their own health. With my albeit somewhat superficial knowledge of American culture, I assumed that most would be far more concerned with individual responsibility than their counterparts in Norway. Hence, I wrote an application based on this question and was quite surprised when I was selected.

In fact, I was quite unprepared to be chosen. I felt that I had given a rather mediocre interview and was also concerned that it was inaccurate to describe a 54-year-old as being mid-career. It was said that the selected candidate was supposed to attend a dinner that same evening, with spouse, if applicable. I called my husband and told him he probably didn't need to put on his suit.

Harvard Medical School

I was awarded the Fellowship, however, and we started planning the upcoming year in the USA. The people at The Commonwealth Fund were not only extremely helpful but also had an extensive network in American healthcare and academia. This led us to the conclusion that philosopher Norman Daniels and psychiatrist Jim Sabin would be good mentors for such a project. Daniels and Sabin had recently published a standard work for everyone working with healthcare prioritization, *Accountability for Reasonableness* (1). Since the Harkness Fellowship is considered prestigious in the USA, most potential mentors are willing to take on such a role. This means that anyone considering applying for the scholarship can be fairly certain they will collaborate with the leading experts in their field.

Norman Daniels and Jim Sabin, professors at Harvard, both accepted. I seized this opportunity, although we had also discussed the possibility of working with Ruth Faden at Johns Hopkins University. However, after considering the overall situation, my husband and I decided that it would be more interesting for our family to be in the Boston area. Since the Harkness Fellowship is awarded to "mid-career" professionals, it often involves a spouse and/or children, and professional considerations are not the only factors at play.

The Harvard Environment

Being connected to academic communities at Harvard was highly stimulating. There was always something happening! I decided to take advantage of every opportunity I had and participated in a rather diverse academic program. This allowed me to attend discussions on topics such as the role of the Supreme Court in American society and the rise in autism diagnoses in California, in addition to seminars more directly related to health policies in general and distributive justice in particular.

Additionally, I discovered the extensive programs run by local bookstores, which featured weekly book launches and author interviews.

The Commonwealth Fund

What happened at Harvard, however, accounted for only half of my time spent there. The Commonwealth Fund has an impressive program for its Harkness Fellows, and I travelled all over the country, visiting places like the Centers for Disease Control in Atlanta, the National Institutes of Health in Bethesda, and Kaiser Permanente in Washington, D.C. Wherever we went, we met with top leaders in both politics and academia.

Meeting John Lewis

While in Washington, we also visited Capitol Hill and met with, among others, civil rights activist and Congressman John Lewis. His activism in the 1960s was instrumental in securing Black rights, particularly voting rights. He told us about the march from Selma to Montgomery—so-called Bloody Sunday—when he himself was severely injured. When we were being photographed together, I asked him if he had any recommendations for what I should do in Atlanta. He invited me to his church—which was also Martin Luther King Jr.'s church—for an anniversary celebration where he would receive an award for his work in civil rights. We were the only white people in attendance in a church filled with hundreds of elegantly dressed congregants. The powerful pastor from Harlem asked us to stand up, since we had come all the way from Oslo, Norway to participate in the celebration. At that moment, we felt very white.

Project: Patient Responsibility and Healthcare Prioritization

The intention behind spending a year as a Harkness Fellow is, among other things, to establish international contacts in one's research field. I stayed in touch with Norman Daniels for several years until he withdrew from active academic life. He provided feedback on two articles I worked on while at Harvard (2, 3) and remained engaged in the subsequent development of this research. I attended a course on personal responsibility and health, which resulted in a chapter in a Norwegian book on challenges in the Norwegian healthcare system (4).

I interviewed so-called Benefit Design Consultants in health insurance companies about whether patients' lifestyles should influence their access to healthcare and, if so, how this should be implemented. Should insurance premiums be higher if someone smoked, had a high BMI, or was a substance abuser? The general attitude was positive towards reducing insurance premiums for those who led an "exemplary" lifestyle, using policies framed as incentives for a health-promoting lifestyle. However, when I asked whether premiums should be increased for individuals who were injured in high-risk sports, I encountered no such openness. As the CEO of United Healthcare put it, "The problem is not that people are too physically active."

It is interesting to note that the question of patients' lifestyles and access to healthcare has been discussed in all healthcare prioritization committees in Norway but has never been included in prioritization criteria. This is a clear difference between American and Norwegian political cultures.

After the Year in the USA

One of the people I got to know at Harvard who became a personal friend, was Christine Mitchell. She was the Director of the Center for Bioethics at Harvard Medical School. We continued our professional collaboration through the European Commission's major research project The Human Brain Project, where I led the Ethics Advisory Board from 2014 to 2021 and where she was a member. This work resulted in scientific articles (5–7) and expanded my international network, including connection with Julian Savulescu (8).

In 2014, the Institute for Studies of the Medical Profession organized an international seminar on physicians' professional satisfaction, burnout, and its implications for quality of care. Several of the academics I met during my Harkness year contributed, among them Lawrence Casalino and Thomas Konrad. Our collaborative work resulted in a special issue of the journal Professions and Professionalism (9).

I have described some of what being a Harkness Fellow meant to me, both professionally and personally, in a way that I hope may be informative for someone considering applying for this scholarship. My experience has been that not only was the year itself highly stimulating, it also provided me with a much larger network and several interesting professional opportunities in the years that have followed.

Literature

1. Daniels N, Sabin JE. *Setting Limits Fairly: Can we learn to share medical resources?* Oxford: Oxford University Press, 2002.
2. Bærøe K, Bringedal B. Just Health: On the conditions for acceptable and unacceptable priority settings with respect to patients' socioeconomic status. *J Med Ethics* 2011; 37: 9.
3. Bringedal B, Feiring E. On the relevance of personal responsibility in priority setting: A cross-sectional survey among Norwegian medical doctors. *J Med Ethics* 2011; 37: 357–361.
4. Bringedal B. Valgarkitektur og personlig ansvar. In: Melberg HA, Kjekshus LE: *Fremtidens Helse-Norge.* Oslo: Fagbokforlaget, 2012
5. Bringedal B, Christen M, Biller-Andorno N et al. "Strangers" in neuroscientific research. On being advisors for ethical, legal, ||social, and philosophical aspects of the Human

Brain Project. In: Leefman J, ed. *The Human Sciences after the Decade of the Brain.* London: Elsevier, 2016

6. Christen M, Biller-Andorno N, Bringedal B et al. Ethical challenges of simulation-driven big neuroscience. *American Journal of Bioethics Neuroscience* 2016 : 7 : 5–17. https://doi.org/10.1080/21507740.2015.1135831
7. Stahl BK, Bitsch L, Bringedal B et al. From responsible research and innovation to responsibility by design. *Journal of Responsible Research and Innovation* 2021; 8: 175–198. https://doi.org/10.1080/23299460.2021.1955613
8. Everett JAC, Maslen H, Nussberger AM et al. An empirical bioethical examination of Norwegian and British doctors' views of responsibility and (de)prioritization in healthcare. *Bioethics* 2021; 35: 932–946. doi: 10.1111/bioe.12925
9. Professional Satisfaction and the Quality of Medical Care. *Professions and Professionalism* 2015: 5: No 1. https://journals.oslomet.no/index.php/pp/issue/view/163 (25.3.2025)

Berit Bringedal
Berit.bringedal@lefo.no
Institute for Studies of the Medical Profession
P.O. Box 1152 Sentrum
0107 Oslo, Norway

Berit Bringedal is Dr. Polit. Senior Researcher, Institute for Studies of the Medical Profession

Atle Fretheim

Evaluating health system interventions: A comparison of different methods

Michael 2025; 22: 26–31.
doi: 10.56175/Michael.12579

Findings from randomized controlled trials are usually considered more trustworthy than those from non-randomized studies. However, trials can be difficult or even impossible to conduct for some interventions. The interrupted time-series design is one alternative approach. The aim of this project was to explore how much an interrupted time-series analysis is likely to yield results that differ from a randomized trial in health policy evaluation.

We re-analyzed several randomized trials by applying an interrupted time-series analysis on the intervention arm only (single arm design) and then compared the results with the conventional trial analysis. The comparisons showed that excluding control group data can lead to erroneous conclusions about intervention effects, but the findings from the single-arm interrupted time series analyses were mostly consistent with the randomized trial analysis.

The randomized controlled trial (RCT) is widely regarded as the gold standard method for measuring the impacts of interventions. In clinical medicine, RCTs dominate effectiveness research. Pharmaceutical products, for example, are rarely approved for marketing without prior evaluation in RCTs.

The field of health policy evaluation is different: Randomized experiments are seldom carried out before, during, or after a policy has been implemented, even when it is highly uncertain whether the policy will have the anticipated effects.

Several factors contribute to the lack of RCTs in health policy evaluation (1), including:

- Practical barriers to limit the intervention to only one part of the population, e.g., when evaluating a mass-media campaign or a new taxation scheme.

- Practical barriers to randomly assign people or geographical areas to intervention and control groups, e.g., when implementation has already begun before an evaluation was planned.
- Political resistance to allow a “lottery” to decide who receives the intervention and who does not.
- Lack of interest in learning about the impact of the policy intervention.
- Legal and ethical barriers, e.g., requiring informed consent — a requirement that rarely is feasible when groups of people (e.g., communities) must be assigned to study arms.

Partly due to these practical challenges, other approaches are being proposed and promoted as alternatives. The simplest method is to observe change from before to after policy implementation. However, since other factors beyond the policy may influence observed change (or lack thereof), this is generally considered a weak method (2).

An improvement of this approach is the interrupted time-series (ITS) design, where several measurements before and after policy implementation help identify trends that might be missed with a simple pre-post comparison. ITS is widely recommended for impact evaluation of policies and is promoted as “the strongest quasi-experimental approach for evaluating longitudinal effects of interventions” (3).

It is well known that different study designs provide different levels of evidence. Thus, evaluation methods can be placed within a hierarchy of evidence strength. Multiple frameworks categorize study designs by reliability. In most, evidence from RCTs is ranked above findings from non-randomized studies. Similarly, many systematic reviews prepared through the Cochrane Collaboration only include RCTs. However, some reviews justify including non-randomized studies, especially for interventions that “cannot be randomized, or that are extremely unlikely to be studied in randomized trials” (4).

Assuming that ITS results are less reliable than those from RCTs, how confident can we be in their validity? Are ITS results likely to align with RCT findings, or is there a significant risk of bias?

While randomization effectively reduces allocation bias, most research on this topic has focused on clinical trials rather than health system and policy interventions (5). Studies comparing RCTs with non-randomized designs often group many different study types together, which may be misleading, as not all non-randomized methods introduce the same level of bias.

Due to a lack of empirical data, debates about study design reliability are largely theoretical, especially regarding ITS.

Thus, more empirical research is needed to inform the debate on evaluation designs. Our aim was to explore how the choice of evaluation design influences findings, specifically whether an interrupted time-series analysis is likely to yield results that differ from an RCT.

Methods

This study was inspired by a cluster-randomized trial of a quality improvement intervention in Norway, where groups of primary care physicians (working in the same practice) were randomized to receive the intervention (6). The trial took longer than anticipated, and by the time results were published, their usefulness was reduced. Also, the study could have been conducted faster using a non-randomized approach, raising the question: Would the results have differed with a less rigorous but more efficient method?

Since our trial data were suitable, we conducted a retrospective ITS analysis using data only from the intervention arm and compared the results with cluster-RCT results. We also identified additional trials for similar analysis.

More specifically, we applied segmented regression analysis, estimating two key effects:

1. Change in level
2. Change in trend (slope) before and after the intervention

To compare these with the RCT estimates, we modeled the ITS effect size halfway through the post-intervention period (i.e., the difference between pre- and post-intervention regression lines at the midpoint, see Figure 1).

Findings

For the Norwegian trial, we found that the ITS result produced a somewhat higher effect estimate (12% vs. 9% in the RCT), but the ITS estimate was within the 95% confidence interval of the RCT estimate. Thus, we concluded that, in this case, the ITS analysis provided a reliable effect estimate (7).

We identified eight additional cluster-RCTs of health system interventions where the authors were willing to share their data for ITS analysis. The findings were largely—but not always—concordant with the RCT results, leading us to conclude that while "failure to use control groups can sometimes lead to erroneous conclusions about intervention effects, the

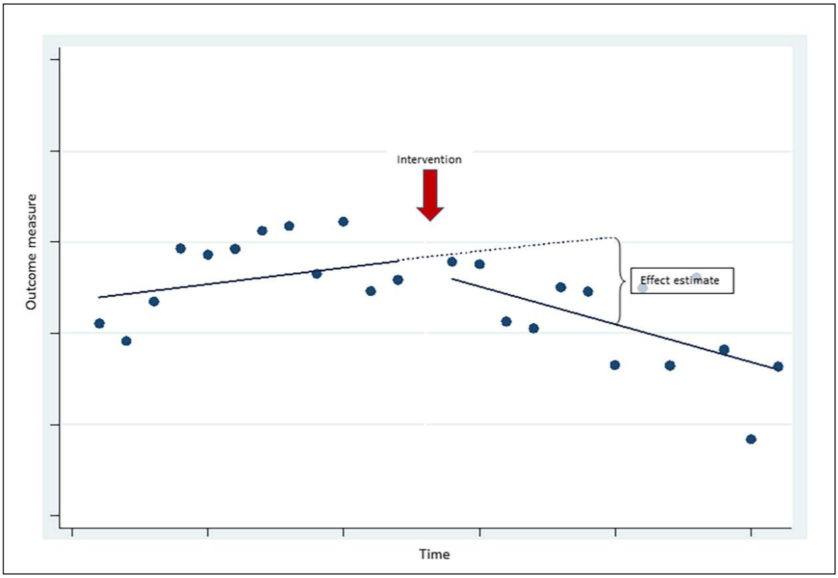


Figure 1. Illustration of how level and trend changes were combined in one effect estimate: the difference between the level of the preintervention regression line and the postintervention line halfway through the postintervention period (from reference 8).

single-arm ITS design, where the pre-intervention period serves as a control, produced findings that were mostly consistent with controlled analyses" (8).

Additionally, our access to time-series data from several RCTs enabled us to explore how results would be influenced by incorporating time trends in both intervention and control groups in RCT analyses. Again, we found that the results were mostly concordant, but not always, leading us to conclude: "If data from RCTs is analyzed without taking into account trends over time, the findings can sometimes be misleading" (8).

Impact of the Project

Both study reports (7, 8) have been widely cited, with 96 and 126 citations, respectively, according to Google Scholar (as of March 17, 2025), including in a Cochrane systematic review (9), indicating that the findings have had an impact. A review of these citations suggests that the impact is primarily methodological, influencing ITS approaches in health policy and public health evaluation (e.g., reference 10).

Impact of my Harkness Fellowship

The impact of the Harkness Fellowship extended beyond this project, fostering lasting collaborations with colleagues in various research initiatives.

The way healthcare services are organized in the United States stands in stark contrast to the universal, tax-funded healthcare system in Norway and other European countries. Experiencing U.S. healthcare services offered insight into how the Norwegian system could evolve, with an increasing share of services paid for by private health insurance. This experience also highlighted the potential consequences if Norway's current system were to weaken or fail.

The Harkness Fellowship gave me a unique opportunity to engage with experts on the principles behind various healthcare delivery models, including policy advisors with perspectives vastly different from my own. It became very clear that ideological positions strongly impact views on health policy. For example, policies designed to ensure broad access to healthcare are seen by some as undue interference with individual rights and responsibilities, especially if tax-based funding is involved.

Exposure to ideological perspectives uncommon in Europe was both refreshing and challenging, offering early insight into the neoliberal wave at the time (2011–2012), which eventually evolved into the rise of Trumpism.

Future Research or Policy Work

In my current position as head of the Centre for Epidemic Interventions Research (CEIR), a key objective is to strengthen the evidence base for decision-makers selecting interventions in crisis situations, e.g., pandemics.

CEIR was recently designated a WHO Collaborating Centre for effectiveness research on public health and social measures in health emergencies. This entails conducting research that extends beyond the Norwegian setting. The centre also aims to improve public understanding of intervention effectiveness, e.g., regarding vaccines.

Equity considerations play a central role, ensuring that benefits from implemented interventions reach all population groups equitably.

Literature

1. Gopinathan U, Elgersma I, Dalsbø T et al. Strengthening research preparedness for crises: lessons from Norwegian government agencies in using randomized trials and quasi-experimental methods to evaluate public policy interventions. *Health Res Policy Syst* 2025; 23: 8. doi: 10.1186/s12961-024-01271-y.

2. Fretheim A, Oxman AD, Lavis JN et al. SUPPORT tools for evidence-informed policymaking in health 18: Planning monitoring and evaluation of policies. *Health Res Policy Syst* 2009; 7: Suppl 1: S18.
3. Wagner AK, Soumerai SB, Zhang F et al. Segmented regression analysis of interrupted time series studies in medication use research. *J Clin Pharm Ther* 2002; 27: 299–309.
4. Reeves BC, Deeks JJ, Julian Higgins JPT et al. Including non-randomized studies on intervention effects. In: Higgins JPT, Thomas J, Chandler J et al., editors. *Cochrane handbook for systematic reviews of interventions*. Version 6.4. Cochrane; 2023. Available from: https://training.cochrane.org/handbook
5. Odgaard-Jensen J, Vist G, Timmer A et al. Randomisation to protect against selection bias in healthcare trials. *Cochrane Database of Systematic Reviews* 2011; Issue 4.
6. Fretheim A, Oxman AD, Håvelsrud K et al. Rational prescribing in primary care (RaPP): a cluster randomized trial of a tailored intervention. *PLoS Med.* 2006 ; 3: e134. doi: 10.1371/journal.pmed.0030134.
7. Fretheim A, Soumerai SB, Zhang F et al. Interrupted time-series analysis yielded an effect estimate concordant with the cluster-randomized controlled trial result. *J Clin Epidemiol* 2013 66: 883–887. doi: 0.1016/j.jclinepi.2013.03.016.
8. Fretheim A, Zhang F, Ross-Degnan D et al. A reanalysis of cluster randomized trials showed interrupted time-series studies were valuable in health system evaluation. *J Clin Epidemiol* 2015; 68: 324–333. doi: 10.1016/j.jclinepi.2014.10.003.
9. Gaitonde R, Oxman AD, Okebukola PO et al. Interventions to reduce corruption in the health sector. *Cochrane Database Syst Rev* 2016 CD008856. doi: 10.1002/14651858.CD008856.pub2
10. Bernal JL, Cummins S, Gasparrini A. The use of controls in interrupted time series studies of public health interventions. *International Journal of Epidemiology*, 2018; 47: 2082–2093, https://doi.org/10.1093/ije/dyy135

Atle Fretheim
Centre for Epidemic Interventions Research (CEIR)
Norwegian Institute of Public Health
PO Box 222 Skoyen, 0277 Oslo
Norway

Atle Fretheim is Research Director at the Norwegian Institute of Public Health and the founding director of the Centre for Epidemic Interventions Research (CEIR), established at the Norwegian Institute of Public Health in 2021. He also holds the position of Adjunct Professor at Oslo Metropolitan University.

Hans Olav Melberg

The difference between policy advice and research

Michael 2025; 22: 32–35.
doi: 10.56175/Michael.12580

The Harkness experience opened doors at the intersection of policy advice and research. Walking through these doors, in turn, taught me at least three key lessons about the differences between good research and good policy advice. Now, after 20 years, I see how the experience has shaped me and that I was wrong – both in thinking that I would remain in the ivory tower forever and in believing that academics had little to learn from policymakers.

Before diving into the differences, I should note two things. First, one common misconception is that only research can lead to the proposals that create the best long-term outcomes. In this perspective, political solutions are seen as inferior, focusing on what is politically profitable in the short term. While there may be many examples of this, the lessons I have learned are different. It is not about how politics is a hindrance to some perceived objective and technically best solution; rather it is about how we can offer better advice by understanding the distinctions between doing research and giving policy advice.

Second, and related, the intersection to be discussed here is between policy advice and research, not politics and research. The role of researchers offering advice is distinct from that of part-time politicians. It is about providing information about consequences and connections, possibilities and probabilities. It is less about the normative valuation of the consequences and the process of weighting what to do in the end.

Consistency versus legitimacy

For researchers, inconsistency is often considered the ultimate sin. Inconsistent arguments in papers lead to rejection, and there is a strong instinct to avoid policy proposals that seem to be inconsistent.

Here is an example: When we do cost-benefit analysis of a new pharmaceutical, some argue that consistency demands that we should include all the costs of future treatments. For instance, a pharmaceutical that reduces a person's probability of heart problems may increase the future costs related to cancer. Should this increase in cancer costs be included when we evaluate whether to reimburse the pharmaceutical and how much to pay? Consistency seems to demand a "yes" (1). On the other hand, many people object to the notion that "future costs" should count against a treatment today.

Fresh out of the Harkness experience, I was faced with this dilemma when I was invited to be part of a government commission to give advice about formal rules for priority setting in the health care sector. The conclusion was that the primary aim of giving advice was not to create a consistent system, but one that was legitimate. If a large share of the population believed it was ethically wrong to include future costs in this way, the system would not be good, even if it was logically consistent.

The argument that legitimacy matters is not the same as accepting that policy advice always should be constrained by majority opinion or, even worse, prejudice. Sometimes good policy advice challenges views built on poor information or unethical preferences. However, sometimes people seem to have informed and true preferences that at least at first glance appear to be inconsistent. Instead of dismissing these, one may take them as food for further reflection (2). And in any case, good policy advice needs to consider people's actual preferences and not what we would like these preferences to be.

Optimal versus feasible

As part of a government commission on priority setting in public health, a key topic is how high the bar for evidence should be before we adopt a public health project. Researchers tend to aim for the optimal solution to problems. This involves setting up a process where evidence is collected, and the expected costs and benefits are calculated. The perceived best evidence in this case is often information from randomized controlled trials. Both the experiment and the process are often time consuming and expensive. Still, the demand that we make an optimal choice easily leads us in this direction.

While the instinct of seeking good evidence is often sensible, it may sometimes lead to hyperrationality and inferior policy advice. Hyperrationality occurs when we ignore the costs associated with the process itself, transactions costs or human costs associated with the collection of evidence and delaying the decision (3). And even if it was theoretically possible to collect the required information, it may not be politically feasible to establish the required bureaucracy. In this case, one may end up with the appearance of a rational process, but based on costly and weak information. Good policy advice takes this into account and propose solutions that that are easier to implement and "better than the current system" without necessarily being perceived as "the optimal" solution.

In the specific example about public health, one may still demand evidence but be more open to evidence from register based data, accept the use of proxy end points and implement reforms in a way that allows us to learn and adjust as we go.

Complexity versus simplicity

A hot policy question is the use of so-called sin-tax. These are taxes on unhealthy products or habits. Tobacco and alcohol are obvious examples, but also soda and products containing sugar have been included. The question in various government commissions is whether and how these products should be taxed.

From an economic perspective, there is a theoretical solution. The products often carry an externality, i.e. a cost that is borne by parties other than those who buy the product. Society contributes to health care, social security for the poor, pays to prevent crime and many other expenses that are related to some of these goods. One may calculate the size of these external costs and propose that the tax should be large enough so that the price reflects the true cost.

A good economic researcher, however, should not stop with this proposal. It is not enough to simply calculate the external costs. We also need to calculate all the other consequences (4). The consumption of one good may be linked to the consumption of others. Less sugar in chocolate may be substituted with unhealthy fat or people eating more chips. All these effects must also be taken into account, and quite quickly the solution becomes complex.

The complexity, combined with a desire to create an optimal solution, may lead to systems with many parameters. Such a solution is likely very sensitive to changes in these parameters. In addition to the technical instability, it may also be politically unstable in the sense that a complex system opens many more access points for lobbying and political pressure. This means that good policy advice should focus on simplicity and robustness, and less on optimal solutions that may be complex and unstable.

As an illustration, consider the case of how much information to collect before making a decision. In some cases, there are sophisticated rules that tell you exactly when it would be optimal to stop collecting more information, but these rules are often complex. Instead, rules of thumb, like «collect five prices and then choose the place with the lowest price» are much simpler and often not far from the optimal solution (5).

An inconclusive conclusion

The example of taxing sugar illustrates the lessons discussed so far. A practical proposal might be inconsistent, as it is technically and politically impossible to create a tax that covers all products containing sugar. People may accept the rationale for a soda tax but perceive orange juice and foods as falling in a different category. It may also be very difficult and costly to calculate the optimal tax on all products, at the same time we know that at least some tax is probably better than no tax – and that this is likely more true for some products than others. This means that a tax on some obviously unhealthy products, may be a better policy advice than a complex system trying to cover all unhealthy products in an optimal system.

The role of the researcher is to identify all the challenges, but the task of providing policy advice is to propose feasible solutions that may be simple, sometimes inconsistent, and not optimal, but still represent improvements over the current system.

Literature

1. de Vries LM, van Baal PH, Brouwer WB. Future costs in cost-effectiveness analyses: past, present, future. *Pharmacoeconomics* 2019; 37:119-130.
2. Cath Y. *Reflective equilibrium*. In: Oxford: The Oxford handbook of philosophical methodology, 2016. https://doi.org/10.1093/oxfordhb/9780199668779.013.32
3. Elster J. *Reason and rationality*. Princeton, NJ: Princeton University Press, 2006.
4. Lloyd P, MacLaren D. Should We Tax Sugar and If So How? *Australian Economic Review* 2019; 52: 19–40.
5. Hey JD. Are optimal search rules reasonable and vice versa? (and does it matter anyway?)" *Journal of Economic Behavior and Organization* 1981; 2: 47-70.

Hans Olav Melberg
hans.melberg@gmail.com
Treschows gate 4
0477 Oslo
Norway

Hans Olav Melberg is Research Director at the Norwegian Institute of Public Health and professor at The Arctic University of Norway.

Jan Frich

Building capacity for clinical leadership

Michael 2025; 22: 36–41.
doi: 10.56175/Michael.12581

High-quality healthcare increasingly relies on teams, collaboration, and interdisciplinary work, and clinical leadership is essential for optimizing and improving health system performance. Healthcare systems that are serious about transformation and innovation must harness the energies of their clinicians as leaders. How can we achieve this? How can health systems build capacity for clinical leadership through leadership development?

While we may use the term "leadership" to describe motivating and influencing others to bring about change, management is often associated with achieving specific results through planning, organizing, and solving problems (1). We may see leadership and management as separate systems and logics of action, but we often use the two terms interchangeably. The backdrop for this project was an international trend focusing on promoting and strengthening clinical leadership in healthcare. The conceptual paper "When Clinicians Lead" by James Mountford & Caroline Webb was one source of inspiration for the project (2): How can clinicians' capacity to lead be developed?

Leadership Development

Leadership development can promote key functions in organizations, such as performance improvement, succession planning, and organizational change. The literature on leadership provides evidence that leadership development helps organizations achieve their goals (1). Target groups for leadership development may include individuals with or without formal leadership roles. Leadership development programs may be delivered internally, externally, or as a combination of both. The scientific literature draws a distinction between leader development (building individual leadership competencies) and leadership development (building collective leadership capacity) (3). Nonetheless, we often use the term leadership for activities aimed at developing individual leaders as well as for building capacity within an organization.

Physician Leadership Development – Does It Work?

I was affiliated with Yale School of Public Health during my year as Harkness fellow, with Professor Elizabeth H. Bradley as a mentor. In collaboration with colleagues at Yale, I conducted a systematic review of medical literature on physician leadership development programs (1). We included articles that described programs designed to expose physicians to leadership concepts, outlined teaching methods, and reported evaluation outcomes. We identified forty-five studies that met eligibility criteria, published from 1950 through 2013.

We found that most programs focused on skills training and technical and conceptual knowledge, while fewer focused on personal growth and awareness. We used a four-level typology by Professor Donald L. Kirkpatrick (1924–2014) to categorize reported program outcomes (4): Reaction (level 1), knowledge (level 2), behavior/expertise (level 3), and system results/performance (level 4).

Half of the studies used pre/post intervention designs to assess program's effects, and four studies used a comparison group. All studies reported positive outcomes, although most relied on learner satisfaction scores and self-assessed knowledge or behavioral change. Only six studies measured and documented system results and favorable organizational outcomes, such as improvement in quality indicators for disease management. The leadership programs and courses in our review used multiple learning methods, including lectures, seminars, group work, 360-degree feedback (multi-source feedback) and action learning projects in multidisciplinary teams.

The systematic review on physician leadership development has been a key reference in the field, with more than 480 citations (Google Scholar) since 2015.

Added Value of Blending Different Professional Groups?

During the fellowship year, I interviewed sixteen healthcare executives from various hospitals and health systems, including Geisinger Health System, Mass General Brigham, Montefiore Einstein Medical Center, Yale New Haven Health System, Cleveland Clinic, Mayo Clinic, University of Missouri Health Care, and Kaiser Permanente.

The interviews focused on leadership and governance structures within the organization, leadership development activities, and the organization's experiences with leadership development. I also explored questions related to professional background and role identity, inspired by research that suggested that different groups of health professionals went through a process of negotiating a new and "hybrid" identity after taking on a leadership role (5). How did executives experience programs targeting one professional group versus programs targeting multiple professions?

Ivan Spehar (University of Oslo) and I analyzed the interview data and published an article investigating the perceived benefits and negative effects associated with multidisciplinary leadership development programs (6). In this qualitative study, we found that one group of executives perceived programs targeting one profession as advantageous, promoting openness and professional relationships among peers (6). Other respondents argued that multidisciplinary programs could add value because such programs helped bridge professional boundaries, strengthen networks, and build leadership capacity throughout an organization.

One informant said: "[I]f we don't understand each other's thinking and acting and why, it just, it seems like we're missing a key component [in leadership development], and so many fears that people have about mixing the two together, I mean, we're mixing them in the workplace!" (6).

Costs, timing, organizational culture, and a lack of knowledge about how to run multidisciplinary programs were challenges the informants associated with delivering multidisciplinary leadership development programs. The study identified issues and challenges related to diversity that can inform organizational policies and decisions about leadership development programs.

Further Research

In 2019, Jaason Geerts (Canadian College of Health Leaders and University of Cambridge) and Oscar Lyons (University of Oxford) invited me to collaborate on a comprehensive and updated review of the physician leadership development literature (7). The twenty-eight studies we examined contained information about learning outcomes or objective measures. We found that programs with internal or mixed faculty were significantly more likely to report organizational outcomes than programs with external faculty only. Furthermore, programs that encompassed an entire organization were associated with better outcomes at the organizational level than small group initiatives and external courses. Additionally, project work, access to a mentor or coach, and the use of instruments to stimulate reflection were associated with organizational outcomes of leadership development programs.

A Gold Standard Program?

Ideally, healthcare leadership programs should be evidence-based to support leaders in improving and transforming health systems. I joined Jaason Geerts and colleagues in designing and describing a novel "Inspire Nursing Leadership Program" that would incorporate gold standard evidence into its design, delivery, and evaluation (9). We developed the program based on a needs analysis, research evidence, and input from nursing, indigenous, and equity, diversity, and inclusion experts. The program's goals included enabling participants to develop leadership capabilities, cultivate strategic community partnerships, lead innovation projects, and connect with colleagues. Design features include an outcomes-based approach, the LEADS framework developed by Canadian College of Health Leaders, and alignment with the principles of adult learning. The program includes leadership impact projects, 360-assessments, blended interactive sessions, coaching, mentoring, and application and reflection exercises.

The IHF Leadership Model 2023

In 2022, I joined an international group that revised the International Hospital Federation's competency model for healthcare leaders, the "IHF Leadership Model 2023". Forty-five experts from thirty countries and regions reviewed the original framework competencies, provided feedback through electronic surveys and online interviews. We incorporated this iterative feedback to revise the framework design, competencies within the framework, and their associated behavioral descriptions. I joined Sylvia Basterrechea (International Hospital Federation) and Andrew N. Garman (Rush University) in writing a report about the process and the revised competency model (10).

The revised model includes thirty-two competencies organized into a framework of six domains: Values, self-development, execution, relations, context management, and transformation. Out of the thirty-two competencies, nine did not appear in the previous version. These nine competencies include: Emotional intelligence, translation and implementation, preparedness and crisis management, digital technologies in healthcare, compassionate leadership, advocacy, sustainability leadership, organizational resilience, and entrepreneurship. Environmental sustainability is emphasized in "Sustainability Leadership" and incorporated across multiple domains, highlighting the significance of this new area of competencies for future healthcare leadership.

Reflections

The Harkness fellowship program offered me insights about US healthcare and global health policy that have been highly relevant and transformative for my academic work. The Harkness project resulted in a highly cited review article and a qualitative study of healthcare leadership development policy and practice. This research laid the foundation for further collaboration with scholars in the field of healthcare leadership internationally. The fellowship experience also gave me valuable insights that was helpful when I subsequently designed and led leadership development initiatives and programs.

In 2018, I met Dr. James Mountford at the 20th Anniversary Celebration of the Harkness Fellowships in Health Policy and Practice in Dorking, England. He told me that he had recently been appointed Editor-in-Chief of "BMJ Leader", a new journal dedicated to healthcare leadership. Over a cup of coffee, I gladly accepted his invitation to serve as Associate Editor. During these years "BMJ Leader" has grown to become a major arena for publishing research, commentaries and blogs within the field of healthcare leadership. The journal played a pivotal role as an arena for sharing experiences and reflections about leadership challenges during the COVID-19 pandemic.

The Harkness fellowship gave me the opportunity to interact with co-fellows and excellent and inspiring people at numerous hospitals, health systems, agencies, organizations, and universities. The Commonwealth Fund put me in a position to study leadership development practices across major and leading US health systems.

Initially, I searched for the best model and the best approaches to leadership development. Gradually, I learned that various models and approaches may work, and that leadership models could vary from centering on unitary leadership approaches to dyadic-, team-based and distributed leadership approaches. I realized that clarity about the organization's leadership model and formal structures, a culture for alignment and a sense of strategic direction and commitment were key elements in well-functioning healthcare organizations. These insights have inspired and influenced my own personal approach to leadership in different settings.

Literature

1. Frich JC, Brewster AL, Cherlin EJ et al. Leadership development programs for physicians: a systematic review. *Journal of General Internal Medicine* 2015; 30: 656–674. https://doi.org/10.1007/s11606-014-3141-1
2. Mountford J, Webb C. When clinicians lead. *The McKinsey Quarterly*, February 2009: https://heeoe.hee.nhs.uk/sites/default/files/1262948843_pdlb_when_clinicians_lead.pdf (30.3.2025).
3. Day DV. Leadership development: a review in context. *Leadership Quarterly* 2000; 11: 581–613. https://doi.org/10.1016/S1048-9843(00)00061-8
4. Kirkpatrick DL. Techniques for evaluating training program. *Training and Development Journal* 1979; 33: 78–92.
5. Spehar I, Frich JC, Kjekshus LE. Professional identity and role transitions in clinical managers. *Journal of Health Organization and Management* 2015; 29: 353–366. https://doi.org/10.1108/JHOM-03-2013-0047
6. Frich JC, Spehar I. Physician leadership development: towards multidisciplinary programs? *BMJ Leader* 2018; 2: 91–94. https://doi.org/10.1136/leader-2018-000070
7. Lyons O, Robynne G, Galante JR et al. Evidence-based medical leadership development: a systematic review. *BMJ Leader* 2021; 5: 206-213. https://doi.org/10.1136/leader-2020-000360
8. Geerts JM, Bishop S, Hiller S et al. Gold standard research and evidence applied: the Inspire Nursing Leadership Program (INLP). *Healthcare Management Forum* 2024; 37: 141–150. https://doi.org/10.1177/08404704241236908
9. Frich JC, Bratholm C, Ravnestad H et al. Medical leadership development during the COVID-19 pandemic. *BMJ Leader* 2022; 6: 316–318. https://doi.org/10.1136/leader-2021-000452.
10. Basterrechea S, Frich JC, Garman AN. Future-ready healthcare leadership: the revised International Hospital Federation competency model. *BMJ Leader* 2025; 9: 80–82. https://doi.org/10.1136/leader-2023-000925

Jan Frich
jan.frich@medisin.uio.no
Institute of Health and Society
University of Oslo

Jan Frich is CEO of The Central Norway Regional Health Authority and Adjunct Professor, University of Oslo.

Bjørn Hofmann

Avoiding medical overactivity as a strategy for improving the health care system

Michael 2025; 22: 42–45.
doi: 10.56175/Michael.12582

The most interesting research is unplanned. My Harkness Fellowship at The Dartmouth Institute for Health Policy and Clinical Practice guided my scholarship towards addressing medical overactivity. Identifying technology as a strong driver of excessive diagnostic testing initiated a study of the major drivers of overactivity as well as strategies to mitigate and prevent it. The studies started at The Dartmouth Institute and nourished by the Harkness Fellowship have directed subsequent research on overdiagnosis, low-value imaging, and medical overactivity in general.

While the intention with my Harkness Fellowship was to study overdiagnosis in breast cancer screening, comparing the USA and Norway (Avoiding Over-Diagnosis as a Strategy for a High Performing Health Care System), my focus rapidly shifted to studying medical overactivity more broadly, with a particular emphasis on the driving force of new diagnostic tests.

As with all research, unplanned possibilities may turn out to give the most fruitful outcomes. Two unplanned events were crucial to my project. First, I was placed with the Shared Decision Making (SDM) group of Glyn Elvyn at Dartmouth Institute. This group was and remains one of the world's leading research environments on shared decision making (SDM). While I had worked extensively on patient autonomy and informed consent, I was a novice in SDM. Being in Glyn Elvyn's group gave me a unique opportunity to learn from some of the very best researchers internationally, which has significantly influenced several of my later publications.

The second pivotal event was that H.Gilbert Welch, my other mentor, was interested in new diagnostic tests – not only in terms of their medical safety, efficacy, and effectiveness but also regarding their economic impact and the subsequent unnecessary testing and treatment they might generate. This introduced me to an exciting world of new technologies, high diagnostic hopes, venture capital, and market estimates.

What began as a specific project to compare screening programs in the USA and Norway ended as a general endeavor to investigate strategies for improving the health care system by avoiding and reducing medical overactivity.

Findings

Both the inspiration from SDM and the studies of diagnostic tests resulted in a publication in the *BMJ* that examined the hype and overuse of medical technology (1). The article analyzed some of the key drivers of irrational implementation and use of technology in healthcare. By identifying some of the main mechanisms behind overuse of technology, it pointed to efforts needed to foster safe, efficacious, effective, efficient, and sustainable use of technology in healthcare.

In another publication in the *BMJ*, Welch and I documented how innovative technologies and ample venture capital are combining to produce new disease biomarkers and mobile monitoring devices that, while technologically advanced, do not automatically provide improvements in clinical care and population health (2). We found that while these innovations may benefit some patients, they also increase the frequency of false alarms, overdiagnosis, and overtreatment, thereby escalating healthcare workload and shifting clinicians' focus towards healthy individuals. We argued that misleading feedback at both the population and individual levels tends to drive further market growth and that clinicians must counterbalance this by educating patients, respecting baseline risk, considering downstream consequences, and anticipating misleading feedback (2).

Impact

The project at Dartmouth inspired a host of related publications on the concept of overdiagnosis (3-8), patient engagement in health technology assessment, and biases and imperatives in handling medical technologies (9, 10).

Furthermore, the Harkness Fellowship stimulated further studies on the (ir)rationality and overuse of diagnostic tests. These studies subsequently led to a research project financed by the Norwegian Research Council: *Improving the radiological services* (https://www.ntnu.edu/web/ihg/iros). The IROS-project had three distinguished Harkness Fellows on the Advisory Board: Fiona Clement, Adam Elshaug, and Stirling Bryan.

IROS identified significant geographical variations in imaging services, low-value imaging procedures, and effective interventions to reduce unnecessary imaging. The project aimed to enhance the quality, safety, effectiveness, efficiency, and sustainability of medical imaging.

In addition to the academic outputs (two PhD-theses, three master's theses, 20 peer reviewed articles, 38 contributions at scientific conferences and a range of articles in newspapers and other media) the project's findings have been used by health authorities in a national project to reduce unwarranted geographical variations and overuse of imaging and laboratory services in Norway. Additionally, I and other members of the IROS-project have served as experts for this national project.

Career

My experiences with the outstanding researchers at Dartmouth Institute and the exposure to U.S. health care/policy have shaped my academic career in several ways. Most notably, they have influenced my research focus and the formulation of my research questions, as well as facilitated valuable networks and collaborations. For example, I have had a very fruitful collaboration on uncertainty in medicine with senior Scientist in the Behavioral Research Program Paul Han at NIH.

Moreover, the insights gained through the exceptional health policy program of the Harkness Fellowship have deepened my interest in health services research, public health, and public health ethics.

Lastly, the fellowship has strongly reinforced my commitment to improving the quality and sustainability of the Norwegian healthcare system.

Future work

I plan to continue working towards improving the quality, safety, effectiveness, efficiency, and sustainability of healthcare by addressing and reducing medical overactivity – a commitment that was first sparked by my Harkness Fellowship.

Literature

1. Hofmann BM. Too much technology. *British Medical Journal.* 2015; 350: h705.
2. Hofmann B, Welch HG. New diagnostic tests: more harm than good. *British Medical Journal.* 2017; 358: j3314.
3. Hofmann BM, Reid L, Carter S et al. Overdiagnosis: one concept, three perspectives, and a model. *European Journal of Epidemiology* 2021; 36: 361-366.
4. Hofmann BM. Back to Basics: Overdiagnosis Is About Unwarranted Diagnosis. *American Journal of Epidemiology* 2019; 188: 1812-1817.

5. Hofmann B. Getting personal on overdiagnosis: On defining overdiagnosis from the perspective of the individual person. *Journal of evaluation in clinical practice* 2018; 24: 983-987.
6. Hofmann B. The overdiagnosis of what? On the relationship between the concepts of overdiagnosis, disease, and diagnosis. *Medicine, health care, and philosophy* 2017; 20: 453-464.
7. Hofmann B. Medicalization and overdiagnosis: different but alike. *Medicine, health care, and philosophy* 2016; 19: 253-264.
8. Hofmann B. Diagnosing overdiagnosis: conceptual challenges and suggested solutions. *European Journal of Epidemiology* 2014; 29: 599-604.
9. Hofmann B. Biases distorting priority setting. *Health Policy* 2020; 124:5 2-60.
10. Hofmann BM. Biases and imperatives in handling medical technology. *Health Policy and Technology* 2019; 8: 377-385.

Bjørn Morten Hofmann
b.m.hofmann@medisin.uio.no
Centre for Medical Ethics
Institute of Health and Society
University of Oslo
0318 Oslo

Bjørn M. Hofmann is Professor of Philosophy of Medicine and Ethics at the Centre for Medical Ethics at the University of Oslo and at the Department of Health Sciences, NTNU in Gjøvik.

Meetali Kakad

Using predictive analytics to transform healthcare outcomes: Lessons from the field

Michael 2025; 22: 46–53.
doi: 10.56175/Michael.12583

Reducing waste in health care was a priority for the United States and Norway in 2015, just as it is today. With the advent of value-based care, healthcare organisations began to tailor services and treatments according to individual risk – often referred to as precision delivery. Automated predictive models – commonly known as "predictive analytics"– were seen as tools capable of identifying individuals or populations at higher risk of adverse events, or those more likely to benefit from specific interventions. Patients and health care professionals could thus intervene earlier and more specifically, resulting in high value care and better health.

Big Data and predictive analytics were to the 2010s what Generate AI and large language models are to the 2020s. Despite considerable hype and interest there was limited understanding of what actually worked and how best to implement these tools in healthcare delivery. Working with Dr. David Bates and colleagues from Harvard Medical School and the Brigham and Women's Hospital in Boston, my Harkness project aimed to bridge this knowledge gap. We reviewed existing evidence and identified learnings from leading healthcare organisations which were utilising predictive analytics at the time. The United States was further ahead than Norway in adopting these technologies – a trend that still holds true. This made the United States an ideal location to study the use of these tools across diverse settings nationwide.

The objectives of the study were to assist healthcare organisations in the United States in developing a business case for predictive analytics and subsequent implementation. It was hoped that the research could influence the Norwegian policy for a common, nationwide electronic medical record system ("Én innbygger, én journal") with analytic capabilities, a policy that was subsequently abandoned.

Insights from the project

Based on a literature review and semi-structured interviews, the study identified use cases for predictive analytics and critical factors for successful implementation, including policy gaps. Our findings indicated the evidence base for predictive analytics in healthcare was immature. We identified a lack of high quality prospective studies of effect.

As is often the case with rapidly developing technologies, the lack of evidence did not deter healthcare organisations from using predictive analytics. Typically, larger well-resourced healthcare organisations were the adopters, while smaller organisations struggled to keep pace due to insufficient investment capabilities and inadequate data management infrastructure. It should be noted that the majority of organisations we spoke to were some way off from implementing predictive analytics at scale, identifying the need for appropriate expertise and governance structures.

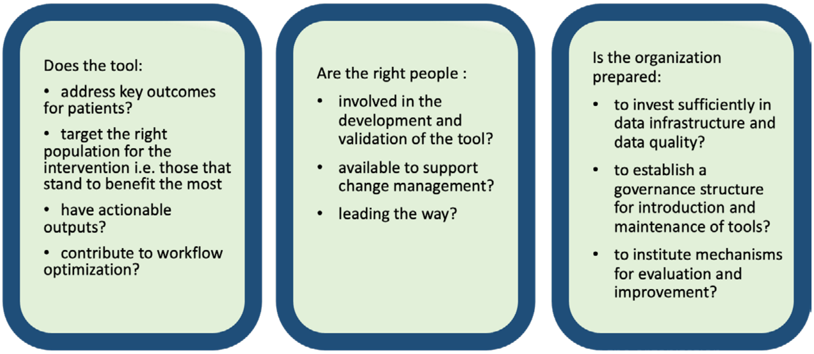
We found multiple use cases for predictive analytics in the literature (1). However, most organisations were using predictive analytics in a limited number of areas: to identify individuals at risk for preventable readmissions, hospital acquired infections, sepsis, clinical deterioration and high healthcare utilisation. Few organisations rigorously measured the impact of these initiatives. Nonetheless, the majority claimed reductions in readmissions and healthcare utilisation amongst high utilisers and improved sepsis outcomes, where these tools have been implemented.

The insights regarding successful implementation were the most interesting aspects of our work and remain relevant for organisations implementing digital tools today (2). We interviewed 34 key stakeholders from healthcare organisations across the United States, federal and state level policymakers, commercial and nonprofit vendors. Our interview subjects highlighted three critical areas for successful implementation of predictive analytic tools (figure 1):

- the predictive tool itself
- involving the right people
- organisational readiness

The predictive tool

There is no shortage of data or data-driven modelling in healthcare. Despite the abundance of predictive models in the literature, most are not implemented in clinical workflows. This can occur for several reasons: Many models address issues of marginal interest to health care practitioners and leaders. Almost everyone we interviewed emphasised the importance of addressing an important issue, preferably a key outcome for patients.



Does the tool:

- address key outcomes for patients?
- target the right population for the intervention i.e. those that stand to benefit the most
- have actionable outputs?
- contribute to workflow optimization?

Are the right people :

- involved in the development and validation of the tool?
- available to support change management?
- leading the way?

Is the organization prepared:

- to invest sufficiently in data infrastructure and data quality?
- to establish a governance structure for introduction and maintenance of tools?
- to institute mechanisms for evaluation and improvement?

Figure 1 Critical factors for successful implementation of predictive analytics

Determing and clearly articulating the "right" problem to address was crucial, both in terms of choosing the best predictive tool for the job, but also for clinician engagement. If the tool did not address an issue of sufficient importance to providers and patients, it was less likely to be used.

Health care providers underscored the need for actionable outputs that contributed to workflow optimisation. Model outputs needed to correspond with a predefined set of evidence-based actions. The most accurate predictive analytic tool can fall by the wayside, if the clinician has no idea what to do with the information. The most successful tools made it easier for users to act appropriately and proactively.

Involving the right people

Healthcare organisations and vendors consistently reiterated the importance of involving the right individuals throughout the entire implementation cycle (development, validation, implementation and evaluation) A multidisciplinary team approach involving clinical, analytical, IT and deployment skills, was a key success factor.

Securing buy-in from leaders at all levels was considered essential for success. Successful organisations took a life-cycle approach to managing and maintaining these tools and committed to long-term funding and investment in these initiatives. However, leadership buy-in from senior management also must be accompanied by the efforts of clinical champions, for successful uptake (3). Access to a cadre of skilled change agents is an essential part of modern healthcare delivery, yet it is often neglected. Recruiting well-respected clinical champions or thought leaders to promote the tool and its utility amongst peers appeared to improve uptake, according to those interviewed.

Organisational readiness

Organisations that successfully implemented predictive analytics tended to treat data as a strategic asset. These organisations invested in data infrastructure, data security and data governance, ensuring quality control and oversight of the introduction and maintenance of predictive tools. Organisations with an established culture of quality improvement typically had an advantage in terms of managing change and measuring its impacts. Having data on the benefits of predictive analytic tools was helpful in improving uptake and securing financing for further scale-up.

Policy reflections

We found that predictive analytics was not being applied at scale in the United States, with Norway lagging even further behind. In addition to organisational constraints mentioned previously, we identified policy-related barriers to uptake. At the time, policymakers were struggling to develop policy and regulations that promoted increased use of data and analytics, without compromising public safety, privacy and acceptability. It was clear, even in 2015, that policy should focus on building a climate of trust around the data and their use. Four key policy principles emerged:

- Patients, providers and the public should be able to trust the quality of the underlying data,
- Predictive tools should be unbiased and accurate,
- Data should be used meaningfully
- Health data should remain secure and not be misused.

These policy goals were considered necessary for acceptance of predictive analytics and other big data initiatives – in the United States and beyond.

We identified concrete policy measures such as partnering with patients and providers to develop robust processes for consent, data collection, linkage and terms of use. More meaningful use of data was seen as a means of boosting public confidence. This would require access to multiple datasets and the ability to link data , necessitating robust information security and accelerated uptake of data standards. The latter was particularly relevant for Norway's national Electronic Medical Record (EMR) policy in 2016, as implementation of international health information standards was slow.

By 2016 it became increasingly clear to us that we needed policies to protect patients and individuals from potential harms or discrimination as predictive and prescriptive tools increased in sophistication (4). It is fair to say that this is even more of a concern today. We were careful to point out the need for a regulatory balancing act: on the one hand ensuring safety and lack of bias, while on the other hand being wary of stifling innovation. Many of these overarching policy themes were discussed at the Big Data Symposium that David Bates and I organised with the Commonwealth Fund in the autumn of 2016.

Longer-term impacts

Predictive analytics continue to be routinely used across many centers in the United States, particularly in the areas of readmissions and sepsis detection. In Norway, however, the integration of these tools has been uneven. Existing Norwegian national digital health initiatives were put on hold in 2022, after a decade marked by a litany of catastrophically expensive failures. Ironically, the SARS-CoV-2 pandemic provided a brief opportunity for agile policymaking and investment in facilitating rapid data linkage from multiple sources to promote meaningful use of data, in the public interest. Whilst the catalytic effect of the pandemic has abated, initiatives such as the Health Data Services have been established to promote access to registry data. It remains unclear to what extent these initiatives promote meaningful use and improve outcomes. It *is* clear, however, that there remains untapped potential within Norwegian health data. If appropriately harnessed, health data could inform policy, research and practice beyond our borders.

My work was presented to policymakers in the Harvard/Partners Healthcare system, Tufts and in Norway. Our work continues to be cited by other researchers and practitioners in the field of healthcare analytics. As such we may infer that our findings pertaining to success criteria and barriers to implementation remain relevant today.

Beyond the Harkness fellowship

The Harkness Fellowship provided a unique opportunity to take a deep dive into the American healthcare system. While there is much to admire and much to criticise within the U.S. healthcare system, I was most fascinated by the thriving culture of innovation, often absent in Norway. There was no shame in trying to solve big, audacious problems and less of a fear of failure. The culture of entrepreneurialism and the professional attitude to innovation pervaded the healthcare institutions I was lucky to visit in the United States. I missed that upon my return to Norway, to my role as Head of E-health at the South-eastern Regional Health Authority. During my time in the United States, I learned that no idea is too small and that we can create systems that applaud, harvest, and follow innovation to fruition.

It was a year of "magical thinking" with room for creativity, reflection and the courage to think big(ger). For me, it resulted in leaving my leadership role, to pursue a PhD in operational research, demonstrating the value of using health data and mathematical methods to support problem-solving and policymaking in healthcare.

My research focused on the impact of municipal admissions units (MAUs) – a national initiative aimed at reducing hospital admissions. MAUs had faced media criticism for persistently low bed occupancy rates, and it was unclear how central policymakers had determined the numbers of MAU beds required. Much of healthcare policy and decision-making is based on historical demand and projections of population growth. It pays little heed to the variations in demand and the science of queueing – which can be useful in accurately estimating capacity requirements. Our analyses indicated that the supply of MAU beds far exceeded the demand and that MAUs had not reduced the number of hospital admissions (5, 6). The work demonstrated how the use of relatively simple models and analysis could have informed not only the initial policy but also subsequent planning.

In January 2018, while pursuing my PhD, I was asked by Senator Bernie Sanders to participate as an expert at a live-streamed Medicare for All Town Hall meeting, at the Senate in Washington DC. It was an incredible experience, viewed by over a million people and reported on by the *Washington Post*. After a year of witnessing the injustices of the American healthcare system, I felt a duty to inform the American public that examples of high quality, equitable healthcare existed. Truth be told, while I applauded the Senator's initiative, I had little faith that the United States was ready for a single payer system and the necessary conversations regarding prioritisation, resource allocation and gatekeeping.

After completing my PhD at the University of Oslo and Akershus University Hospital (Ahus), I moved to the private sector, serving as Chief Medical Officer for a remote patient monitoring scale-up, Dignio. It was thrillingly out of my comfort-zone and I likened the experience to an "MBA-by-doing". My work involved closely collaborating with clinicians in hospitals and municipalities to redesign health care in a more sustainable manner. This experience inspired me to return to clinical work and after spending the majority of my career working at a systems level, I am now retraining as an oncologist. It is a challenging transition but there is something extremely satisfying bringing my experience from public health, leadership and the use of data and technology to a clinical setting. I am particularly interested in bringing the Common Sense Oncology movement to Norway. Common Sense Oncology promotes cancer care and research focusing on improving outcomes important to patients and their families, such as overall survival and quality of life (7-8).

I am most grateful for relationships established during the Fellowship, both within the Commonwealth Fund and the Harkness network. This unique asset continues to be a source of advice, friendship and new opportunities. My mentor, David Bates, remains a trusted advisor and friend. I had the privilege of being temporarily seconded to the data-analytics team at the Health Foundation (a leading UK health policy think-tank), during my PhD. This was via the UK Harkness Fellow Adam Steventon. I also recruited Luke O'Shea, another 2015–2016 fellow, to the Dignio Advisory Board, as we looked to expand further in the UK. These are just some examples among many.

Finally, it would be remiss to discuss the impact of my Harkness experience without mentioning my family. It was a magical year for us all: a new house, a new school (Quaker, no less), new colleagues and new friends. Moving to a different country is not without its challenges but it can be both life-changing and life-affirming.

Literature

1. Parikh RB, Kakad M, Bates DW. Integrating Predictive Analytics Into High-Value Care: The Dawn of Precision Delivery. *JAMA* 2016; 315: 651–652. doi: 10.1001/jama.2015.19417
2. Kakad M, Rozenblum R, Bates DW. Getting Buy-In for Predictive Analytics in Health Care. *Harvard Business Review* June 20, 2017 https://hbr.org/2017/06/getting-buy-in-for-predictive-analytics-in-health-care (5.5.2025)
3. Miller RH, Sim I. Physicians' use of electronic medical records: barriers and solutions. *Health Aff (Millwood)* 2004; 23:116–126. doi: 10.1377/hlthaff.23.2.116
4. Bates DW, Heitmueller A, Kakad M et al. Why policymakers should care about "big data" in healthcare. *Health Policy and Technology* 2018; 7:211–216. https://www.sciencedirect.com/science/article/pii/S2211883718300996 (5.5.2025)
5. Kakad M, Utley M, Rugkåsa J et al. Erlang could have told you so—A case study of health policy without maths. *Health Policy* 2019; 123:1282–1287. https://www.sciencedirect.com/science/article/pii/S0168851019302349 (5.5.2025)
6. Kakad M, Utley M, Dahl FA. Using stochastic simulation modelling to study occupancy levels of decentralised admission avoidance units in Norway. *Health Systems* 2023 February 15: 1–15. https://www.tandfonline.com/doi/full/10.1080/20476965.2023.2174453
7. Booth CM, Sengar M, Goodman A et al. Common Sense Oncology: outcomes that matter. Lancet Oncol 2023; 24: 833-835. https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(23)00319-4/abstract

8. Kakad M, Common Sense Oncology: Hvor mye sunn fornuft viser onkologer i Norge? OnkoNytt 2015 April 25: 46–48. https://onkonytt.no/common-sense-oncology-hvor-mye-sunn-fornuft-viser-onkologer-i-norge/ (13.5.2025)

Meetali Kakad
meetalikakad@gmail.com
Akershus University Hospital
Sykehusveien 25
1478 Nordbyhagen
Norway

Meetali Kakad MD, MPH, PhD, MFPH (UK) is an oncology resident at Akershus University Hospital

Marianne Storm

Coordinating health care for people with serious mental illness

Michael 2025; 22: 54–59.
doi: 10.56175/Michael.12584

Healthcare systems often struggle to meet the care and treatment needs of individuals with serious mental illness. My Harkness project investigated how services are coordinated for people with serious mental illness, the factors influencing coordination, and the role of peer support in facilitating integrated health care. The project is structured in three parts:

First, it outlines the key challenges in coordinating transitions from hospital to home.

Second, it describes how medical, mental health, and social services are coordinated in two northeast states in the United States and identifies ongoing coordination challenges. This is followed by an exploration of care coordination practices in Norwegian healthcare services.

Third, it examines the role of peer support in care coordination for individuals with serious mental illness with examples of digital peer support initiatives both in the United States and Norway.

Serious mental illness (SMI) encompasses conditions such as schizophrenia, schizoaffective disorder, psychotic disorders, major depressive disorders, and bipolar disorder (1). Many individuals with serious mental illness also experience chronic medical health conditions, requiring coordinated cross-sectoral care. These co-occurring chronic health conditions are associated with a shorter life expectancy of approximately 10–20 years compared to the general population (2). Coordinated mental and medical healthcare is a critical policy priority.

Care coordination is a person-centered approach that ensures individuals' multiple and evolving health needs are met through appropriate care delivered by the right professionals at the right time (3). Integration involves coordinating healthcare across various professionals, multidisciplinary teams, services, and support systems. Integrating mental health into primary care and co-locating services aims to improve coordination and outcomes for individuals with SMI. My Harkness project aimed to investigate how services are coordinated for people with SMI and chronic medical conditions. It also aimed at identifying influencing factors and assessing the role of peer support in coordinating health care.

First, we carried out a scoping review of the research literature (4) to provide an overview of the key challenges in coordinating transitions from hospital to home and to identify approaches that can improve coordination and the ability of people with SMI to manage their lives in the community. Second, we investigated how medical, mental, and social services for people with SMI were coordinated by service providers in two Northern New England states (5). Third, we explored the potential of peer support to improve the coordination of physical and mental health services for people with SMI (6).

The scoping review (4) included a broad systematic literature search, screening 2413 titles, reading 285 abstracts and 55 research articles in full text, and including 16 articles in the final review. The interview studies (6,7) were conducted with service providers and peers in healthcare organizations (e.g., community mental health centers, welfare service offices, and primary care). Data sources included 35 interviews with administrative leaders and healthcare professionals (psychiatrists, psychologists, social workers, nurses) in the selected organizations and five interviews with peer support workers.

Findings

The scoping review (4) identified two primary challenges in coordinating hospital-to-home transitions for individuals with SMI. First, personal challenges influencing the individual's community adjustment and ability to manage life at home due to symptoms, worries, and lack of daily activities. Second, systematic challenges influencing continuity of care, difficulties with accessing and receiving consistent mental health treatment and medications post-discharge. The approaches to improving care coordination were multifaceted programs or interventions that commonly addressed knowledge about illness and resources, decision-making involvement, and family and peer support. Several interventions targeted many of the identified challenges to care coordination.

In the interview study with service providers (5), we described coordination and related challenges challenges at three levels: (1) Provider-level coordination, describing how service providers bridge services and manage inter-professional communications, and their contrasting perspectives on the locus of responsibility for coordination for people with SMI and medical comorbidities. (2) Individual-level coordination describes how service providers support the person's self-management and assist with care navigation, emphasizing trusting and continuous relationships. Providers describe how the right to individual choice and autonomy can hamper information sharing and challenges due to patients being unaware of physical problems, not seeking adequate physical care, and avoiding recommended treatment. (3) System-level coordination describes how providers link service users with appropriate residential and care provision services. However, there are significant difficulties with ensuring adequate service funding, access to psychiatric inpatient care, housing for service users, and recruiting and retaining staff. Primary care team huddles and shared medical record systems were examples of care integration and coordination solutions attempted across the two states.

Our paper on peer support in coordinating health services for individuals with SMI (6) demonstrates that peer support workers have the capacity for physical and mental health coordination. They use their experiences to help service users prepare for upcoming health visits and connect them with community services. Peers are also aware that their role is non-clinical as their relationship with the service users is based on mutuality. However, challenges remain in funding peer support services, and peers experience often struggle with managing boundaries as well as their own health issues.

Impact

Upon returning to Norway, I continued my research on coordinating mental health services for people with SMI to explore how it was evolving in the Norwegian context and to assess potential challenges. Norway has made notable progress in integrating mental and medical healthcare for people with SMI. A key goal is to ensure that inpatient capacity in mental health care meets the needs of individuals requiring inpatient treatment (7). There is also a strong emphasis on improving the quality of life and life expectancy for these patients. The government has funded multidisciplinary teams, such as Flexible or Assertive Community treatment teams, to ensure continuous service and early intervention for people at home. A patient pathway for mental health has been introduced to ensure timely follow-up of mental, medical, and social needs, guidelines for treatment, and agreements between specialist and municipal services on hospital-to-home transitions (7).

We interviewed 27 municipal healthcare professionals (medical doctors, nurses, social workers, and social educators) in one rural and one urban municipality in western Norway to gather their perspectives on care coordination for individuals with SMI (8). The interviewees emphasized that ensuring a stable and meaningful home life is crucial for recovery and maintaining good health. Care coordination involves ensuring proper housing, supporting daily activities, and timely health care access. Coordinating preventive measures to support the person at home, including symptom monitoring, emergency psychiatric care plans, general practitioner involvement, and medication adjustments, is crucial.

Individuals with SMI often visit the emergency room during acute episodes, especially at night or on weekends. Coordinating care in these situations is particularly challenging due to the complex health needs and difficulties accessing medical records. Inpatient care is limited to stabilizing acute and severe symptoms. The interviewees described hospital discharge coordination as challenging particularly concerning information exchange and disagreement over who is responsible for assessing and responding to the person's physical health needs. Although patient pathways are in place to enhance system-level care coordination by clarifying responsibilities and improving cooperation between the primary and specialist health services for individuals with SMI, little change was perceived for this population post-implementation.

Reflections on career impact

There has been a growing focus in Norway on peer support in mental health, including formalized training and employment of peer support workers in mental health services. During my Harkness fellowship, I was involved in a pilot study carried out by Karen Fortuna on digital peer support. This study involved a peer-delivered self-management intervention for people with SMI using a mobile application (app), PeerTECH, to support recovery and illness management and resulted in three published papers (9–11). Analysis of text-message exchange in the PeerTECH app along with interviews with peers and service users highlighted the value of human support from peers in delivering the intervention and illustrated how the peers integrate peer support through personalized text messages and sharing their lived experiences. They also identified and helped address the person's unmet health needs (10,11).

Peer support is a form of social support relying on the peer's own experience of having a mental illness and having progressed in recovery to be able to manage his/her illness and live a fulfilling life in the community (9). It is an alternative to conventional treatment and care supporting self-determination, personal empowerment, and choice. The development of peer support services for people with SMI in the United States can be viewed as a response to inadequate access to affordable and effective community-based mental health services (9).

Upon returning to Norway, I received a seed grant from HelseCampus, a research cluster funded by the University of Stavanger, Stavanger University Hospital, and Stavanger municipality, to continue research on digital peer support and to assess the usability of PeerTECH in Norway. Together with service users, peer support workers, and service providers in municipal mental health services, we have co-created and culturally adapted PeerTECH into a Norwegian DigiPer app (DigitalLikeperson app). We are preparing a pilot study with DigiPer with Norwegian service users and peer support workers to assess its feasibility and preliminary effectiveness.

Reflections on future research

In 2024, we received funding from the Norwegian Research Council for a project to implement and evaluate an interprofessional Health Needs Assessment for older adults living at home in two Norwegian municipalities. This project aims to systematically identify unmet health and care needs, support independent living, and enhance quality of life. It addresses early detection of health needs through interprofessional and coordinated preventive approaches.

The project involves co-designing interprofessional health needs assessment with stakeholders, training healthcare professionals, and conducting a randomized controlled trial (RCT) to evaluate its effectiveness. Outcomes measured will include quality of life, survival, health service use, and cost-effectiveness. It will explore how interprofessional health needs assessment influences interprofessional collaboration, care coordination, decision-making, and implementation at various levels. Ultimately, the project aims to reduce service delivery inequalities, support healthy aging, and promote a consistent and fair allocation of health services for older adults.

Literature

1. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 2022; 5th ed. https://doi.org/10.1176/appi.books.9780890425787 (10.4.2025)
2. Walker ER, McGee RE, Druss BG. Mortality in Mental Disorders and Global Disease Burden Implications: A Systematic Review and Meta-analysis. *JAMA Psychiatry* 2015; 72: 334–341. doi:10.1001/jamapsychiatry.2014.2502
3. McDonald KM, Schultz E, Albin L et al. *Care Coordination Atlas*. Version 4 Agency for Healthcare Research and Quality; 2014. https://www.ahrq.gov/ncepcr/care/coordination/atlas.html (14.04.2025)

4. Storm M, Husebø AML, Thomas EC et al. Coordinating Mental Health Services for People with Serious Mental Illness: A Scoping Review of Transitions from Psychiatric Hospital to Community. *Adm Policy Ment Health* 2019; 46: 352–367. https://doi.org/10.1007/s10488-018-00918-7
5. Storm M, Fortuna KL, Gill EA,et al. Coordination of services for people with serious mental illness and general medical conditions: Perspectives from rural northeastern United States. *Psychiatric Rehabilitation Journal* 2020; 43: 234–243. https://doi.org/10.1037/prj0000404
6. Storm M, Fortuna KL, Brooks JM et al. Peer Support in Coordination of Physical Health and Mental Health Services for People with Lived Experience of a Serious Mental Illness. *Front Psychiatry* 2020; 11: 365-372. https://doi.org/10.3389/fpsyt.2020.00365
7. *Opptrappingsplan for psykisk helse (2023–2033).* Norwegian Ministry of Health and Care Services; 2022. https://www.regjeringen.no/no/dokumenter/meld.-st.-23-20222023/id2983623/ (14.04.2025)
8. Skjærpe JN, Joa I, Willumsen E et al. Perspectives on Coordinating Health Services for Individuals with Serious Mental Illness – A Qualitative Study. *Journal of multidisciplinary healthcare* 2022; 15: 2735–2750. doi: 10.2147/JMDH.S384072
9. Fortuna KL, Storm M, Aschbrenner KA, et al. Integration of Peer Philosophy into a Standardized Self-Management Mobile Health Intervention. *Psychiatric Quarterly* 2018; 89: 795–800. https://doi.org/10.1007/s11126-018-9578-3
10. Fortuna KL, Storm M, Naslund et al. Certified Peer Specialists and Older Adults With Serious Mental Illness' Perspectives of the Impact of a Peer-Delivered and Technology-Supported Self-Management Intervention. *The Journal of Nervous and Mental Disease* 2018; 206: 875–881. doi: 10.1097/NMD.0000000000000950.
11. Fortuna KL, Naslund JA, Aschbrenner KA, et al. Text message exchanges between older adults with serious mental illness and older certified peer specialists in a smartphone-supported self-management intervention. *Psychiatric Rehabilitation Journal* 2019; 42: 57–63. https://doi.org/10.1037/prj0000305

Marianne Storm
Marianne.storm@uis.no
Department of Public Health
Prof. Olav Hanssensvei 10
University of Stavanger
4036 Stavanger
Norway

Marianne Storm is a professor of health sciences at the University of Stavanger and an affiliated professor at Molde University College and Stavanger University Hospital.

Unni Gopinathan

Understanding the impact of health reforms and insurance designs on population health: Lessons from the experimental laboratory of the United States

Michael 2025; 22: 60–66.
doi: 10.56175/Michael.12585

My Harkness Fellowship explored two key questions: how enrollment in health insurance plans with high out-of-pocket costs affect care for patients with chronic illness, and how health systems address patients' social needs. These questions reflect trends accelerated by the Affordable Care Act.

The U.S. system—with its state-by-state variation—offered a unique setting for comparative research. In one study, I examined the effects of high-deductible plans on patients with chronic obstructive pulmonary disease; in another, I analyzed how healthcare organizations implemented models for addressing social needs like housing and food insecurity. The latter work is especially relevant for Norway, where cross-sector collaboration is essential to strengthen prevention and achieve population health goals.

Six years after my return to Norway, it is sobering to see the United States scale back its engagement with global health collaborations and witness the growing pressure on its science-based institutions. This underscores the importance of the Commonwealth Fund's mission and the Harkness Fellowship in advancing core values such as equity, diversity, and inclusion through global partnerships.

When preparing my proposal for the Harkness Fellowship, I set out to explore how the healthcare systems in the United States prioritize prevention, focusing on the impact of institutional changes introduced and influenced by the landmark Affordable Care Act. The motivation was that prevention is an underprioritized area of effort and investment within the Norwegian healthcare system. Understanding how healthcare reforms and institutional changes in the United States have heightened attention to prevention could therefore provide valuable insights.

The Affordable Care Act is the landmark legislation, enacted under President Barack Obama, that have contributed to expansion of health insurance coverage and access to healthcare for millions of previously uninsured (1). In addition to the legal provisions enabling expansion of health insurance, the Affordable Care Act also established key institutional arrangements that advanced a stronger prevention agenda, including provisions supporting the development of Accountable Care Organizations. These are groups of primary care practices, hospitals, and other healthcare providers who, through financial incentives—including models that involve accepting financial risk and sharing savings when care is delivered below benchmark costs—come together to provide more efficient healthcare, prevent illness and the use of costly acute care and improve population health outcomes.

Two broad questions, reflecting major trends with system-wide impact across the U.S. healthcare system, became the foundation of my proposal:

First, how does the utilization of healthcare and outcomes for patients with chronic conditions change when exposed to high out-of-pocket payments? One major trend, which has accelerated after the Affordable Care Act, is the increasing preference for high-deductible health plans by employers as a cost-control measure (2) — a shift that may be at odds with prevention goals if it leads patients to delay or avoid necessary care. At the same time, some healthcare policy experts argue that high-deductible health plans can promote prevention by making people more cost-conscious and encouraging healthier behaviors to avoid expensive care. Although premiums are low, patients who require outpatient care or emergency department visits risk facing high out-of-pocket costs due to the high deductible levels of these plans. I was mentored by Dr. Frank Wharam, who has made major novel contributions to the literature on the impact of high-deductible plans on healthcare utilization, costs and outcomes (3).

The second question centered on how healthcare addresses the broader social factors, such as lack of access to healthy food or poor housing conditions, that contribute to patients' medical needs. In many settings—especially in Norway and other European countries—social welfare services traditionally respond to these needs. In contrast, the United States has seen an increasing policy shift that places healthcare systems at the center of efforts to address social needs, spurring a growing body of literature on the subject (4). My time in the United States offered a chance to explore the implementation of such models in Rhode Island and New Jersey, under the guidance of Prof. Roberta Goldman from Brown University. I especially explored how the systems and provider-levels managed the tension between a biomedical focus on treating clinical illness and a social focus on addressing upstream factors. For both questions, the goal was to draw on the fact that the United States, with its variations in how states, insurers, and employers design and implement the delivery of healthcare, serves as a "laboratory" for research using comparative methods.

Main findings of my work

For different reasons, the two studies I have led have not yet been published. One study examined how individuals with chronic obstructive pulmonary diseases responded to a shift from traditional insurance to high-deductible health plans with higher out-of-pocket costs. The analysis suggested lower use of healthcare services following the transition, particularly emergency department visits and hospital admissions. Importantly, there were no clear indications of worsened short-term outcomes, such as patients presenting to the emergency department or hospital with more severe acute illness. This may suggest a shift in how individuals with chronic obstructive pulmonary disease manage their condition—potentially adopting alternative care strategies in response to increased financial exposure, thereby avoiding the need for emergency or inpatient care. These observations contrast with findings in other chronic disease populations, where similar insurance design changes have raised concerns about delayed or foregone care (5). My work highlights how cost-sharing arrangements can influence healthcare utilization in condition-specific and context-dependent ways, shaped by both the nature of the illness and the structure of the surrounding healthcare system.

The second study focused on how healthcare organizations in Rhode Island and New Jersey implemented models for identifying and responding to patients' unmet social needs within clinical settings. My findings point to a range of implementation challenges, particularly in hospital environments, where workflows are typically centered on acute medical care. Interviews with healthcare leaders, managers and providers involved in these efforts revealed a broader tension between individualized approaches implemented by healthcare organizations to address social needs and the more structural, population-level interventions needed to address root causes such as housing conditions or food access. These reflections raised deeper questions about the role of the healthcare system in responding to social needs, and where responsibility should lie—especially given that community-based and social service organizations often hold deeper expertise and longer-standing engagement with these issues.

In interviews with healthcare leaders, managers and providers about their perceptions of healthcare's role in addressing social determinants of health, it was striking to note that many viewed social determinants as services that individuals need to access and benefit from. I made similar observations while attending the ethics meetings of the Ethics Advisory group of Harvard Pilgrim Health Care (a provider of health benefit plans, programs and services), which debated ethical aspects of key issues faced by the payer. At the time, these meetings were chaired by Dr. Jim Sabin, who together with Norman Daniels, developed the Accountability for Reasonableness Framework for securing a due process when making difficult prioritization decisions in healthcare systems (6). It struck me that during one of these meetings, several participants did not view "social determinants"—such as heat or transportation—as universal entitlements and argued that those who had paid for their healthcare should not be expected to subsidize these services for others with fewer means. These observations contrast with the approach to social determinants in Norway and other European countries, where the focus is on how population-level policies—such as those related to education, social welfare, and environmental protection—contribute *universally* to better health outcomes.

Further contributions inspired by my U.S. experience

In addition to my own research, I contributed to a piece co-authored with the other Harkness Fellows, published in *Health Affairs*: (7). In this piece, we argued that while the U.S. excels in innovation and investment, its healthcare system is fragmented, marked by significant regional disparities and inconsistencies that set it apart from the more unified, government-supported models in other high-income countries. We pointed out that politicized debates over initiatives like the Affordable Care Act—and the varying approaches to its implementation across states—have created a landscape marked by political polarization around healthcare issues. We further argued that framing healthcare as a privilege rather than a right underlies many systemic issues. This approach not only fuels high costs through mechanisms like inflated drug prices and high-deductible plans but also blurs accountability, resulting in a focus on financial outcomes over patient care. In contrast, countries with universal coverage, centralized pricing, and clearer governance demonstrate how a more coordinated system can better address the needs of their populations.

Conversations with public health experts in the United States also motivated me to reflect on other public health challenges faced there and in Norway. One example is the growing promotion of vaping by multinational tobacco companies, which are increasingly targeting the youth market with these products. One such conversation motivated me to write a response to representatives of Philip Morris International, who in the Norwegian medical daily *Dagens Medisin* had argued that they, through their efforts on harm reduction, should be seen as a "team player" in the efforts for a smokefree world (8). In response, I argued that tobacco companies' push for harm reduction products primarily to maintain their profits and brand strength, rather than stemming from a genuine commitment to public health. Despite promoting harm reduction, the industry actively resists effective tobacco control policies, particularly in low- and middle-income countries, undermining global public health efforts. Moreover, the tobacco industry's ongoing marketing to youth and attempts to bypass regulations contradict their claims of supporting a smoke-free future. Given their role in creating the tobacco-related health crisis and their opposition to key tobacco control measures, tobacco companies have no rightful place in the efforts for tobacco prevention and control and should not be seen as trustworthy partners in the push for a smoke-free world.

Reflections on national and international impact

For the Norwegian setting, I think my project on how healthcare organizations are addressing social needs holds greater relevance. This is because the high-deductible health plans are relatively unique to the U.S. context and the out-of-pocket expenses experienced by patients in these plans are many times greater than in the Norwegian context, where the deductible level in primary care is relatively low (currently around 300 USD) and patients do not pay for emergency department visits and hospitalizations. However, I believe the United States has made more progress in exploiting variations in out-of-pocket costs among patient groups to assess their impact on health care utilization and outcomes, whereas, in Norway, the evidence base on the impacts of out-of-pocket payments remains relatively sparse.

I believe my work on addressing social needs raised critical questions about the role of healthcare systems in relation to other sectors' responsibilities for population health. This links directly to a major challenge faced by healthcare systems worldwide: bridging the gap between health needs and available resources. Priority-setting will be crucial to ensure effective and equitable resource allocation, requiring open dialogue among policymakers, providers, and the public. It may also be necessary to examine how other sectors contribute to population health goals and impact healthcare utilization. As Norway and other countries shape their healthcare systems, it may be beneficial to consider how unmet social needs contribute to poor health and increased utilization, and how these needs can be efficiently and equitably addressed. The approach in the United States, which centers around identifying and addressing social needs in the clinical setting, may not be the way forward. Instead, regional health authorities could work with other social welfare institutions to assess whether patient groups, particularly those with chronic conditions or mental illness, are underserved in terms of social needs like food, income support, or housing. These institutions could advocate for more cross-sector involvement, potentially improving medical outcomes and population health. Such responsibility, guided by the concept of "anchor institutions," is also being advocated in the U.K.'s National Health Service—a system that, for Norway, tends to offer a better comparison (9).

Career impact and further research

After my Harkness fellowship, I returned to the Norwegian Institute of Public Health in a scientist position. I was quickly pulled into the public health response to the Covid-19 pandemic, working on advising municipalities on managing outbreaks, reviewing emerging evidence to inform national guidance and strengthening the institute's capacity for research to generate timely analysis. Partly inspired by my Harkness fellowship research on healthcare's role in addressing social needs, and motivated by the glaring inequities exposed by the Covid-19 pandemic, I explored how this applies globally in a *British Medical Journal* paper, focusing on the World Health Organization's role in addressing the social determinants of health (10). During my time in the United States, I experienced maturation and increasing skills to engage with experts, which has benefited me when leading international projects after my return. I have worked with several of my fellow Harkness fellows on EU proposals, led a major World Bank project on financing of healthcare systems, and currently I lead several research projects involving international partners. In my current role, I continue to work on building international partnerships, focused on strengthening the evidence base for public health and social measures for managing pandemics.

The United States: A Changed Landscape from Then to Now

In closing, it is difficult not to briefly reflect on the current political situation in the United States. and its impact on science-based institutions. At the time of writing, the U.S. public administration responsible for healthcare is facing its most challenging moment. I have observed that many key institutions I had the privilege of visiting and learning from, such as the Agency for Healthcare Research and Quality, have experienced significant staff cuts and will likely struggle to fulfill their missions. This serves as a reminder that the trust between politicians and public administration—

something we enjoy largely in Norway, and which was crucial to the success of the public health response to Covid-19—should never be taken for granted. Moreover, as the federal government in the United States takes steps to significantly scale back its engagement in global health collaborations, institutions like the Commonwealth Fund and its Harkness Fellowship can play a critical role in sustaining global partnerships and promoting core values such as equity, diversity, and inclusion.

Literature

1. Obama B. United States health care reform: progress to date and next steps. *JAMA* 2016; 316: 525-352.
2. Wharam JF. The ACA and high-deductible insurance--strategies for sharpening a blunt instrument. *N Engl J Med* 2013; 369: 1481-1481.
3. Wharam JF, Lu CY, Zhang F et al. High-deductible insurance and delay in care for the macrovascular complications of diabetes. *Ann Intern Med* 2018; 169: 845-854.
4. Alderwick H, Gottlieb LM. Meanings and misunderstandings: a social determinants of health lexicon for health care systems. *Milbank Q* 2019; 97: 407-419. doi: 10.1111/1468-0009.12390
5. Wharam JF, Zhang F, Eggleston EM et al. Diabetes outpatient care and acute complications before and after high-deductible insurance enrollment: a natural experiment for translation in diabetes (NEXT-D) study. *JAMA Intern Med* 2017; 177: 358-368.
6. Daniels N, Sabin JE. *Setting Limits Fairly: Can we learn to share medical resources?* Oxford: Oxford University Press, 2009.
7. Malâtre-Lansac A, Docherty M, Gopinathan U et al. An International Perspective On The Paradoxes Of US Health Care. *Health Affairs Forefront*. 2019. doi:10.1377/forefront.20190826.181413
8. Gopinathan U. Ikke troverdig om skadereduksjon: *Dagens Medisin* 8.3.2019 https://www.dagensmedisin.no/debatt-og-kronikk/ikke-troverdig-om-skadereduksjon/409861. (8.2.2025)
9. Health Foundation. The NHS as an anchor institution 28.3.2018 https://www.health.org.uk/features-and-opinion/features/the-nhs-as-an-anchor-institution.(1.4.2025)
10. Gopinathan U, Buse K. How can WHO transform its approach to social determinants of health? *BMJ* 2022; 376: e066172.

Unni Gopinathan
Unni.gopinathan@fhi.no
Vestbrynet 10E
1176 Oslo

Unni Gopinathan is Scientist, Centre for Epidemic Interventions Research, Norwegian Institute of Public Health.

Christer Mjåset

Bringing more value to patients – lessons from different health systems

Michael 2025; 22: 67–72.
doi: 10.56175/Michael.12586

The Harkness Fellowship provides a unique opportunity to study international health policy and systems. This article presents findings from research conducted during the fellowship at Harvard School of Public Health 2019-20 on enablers and barriers of value-based health care (VBHC). The studies 1) examined the implementation of VBHC across four different health systems, 2) analyzed the impact of bundled payments in spine surgery, 3) explored the motivations behind investments in Patient-Reported Outcome Measures (PROMs), and 4) identified key insights from U.S. hospitals with successful PROMs programs. These findings contribute to the understanding of how to establish and promote more value-driven care and provide recommendations for future policy and research.

Healthcare systems worldwide face rising costs without proportional improvements in quality of care. Value-Based Health Care (VBHC) aims to bring more value to patients by improving patient outcomes relative to cost. However, systematic outcome measurement remains a significant gap in most healthcare systems today making it difficult to monitor quality of care. Moving forward, it is essential to understand the current landscape — including the motivations for and challenges in delivering more value to patients. The Harkness Fellowship enabled an in-depth examination of VBHC implementation in different settings, with a particular focus on the US healthcare system and the critical role of systematic outcome measurement.

Project Description and Aims

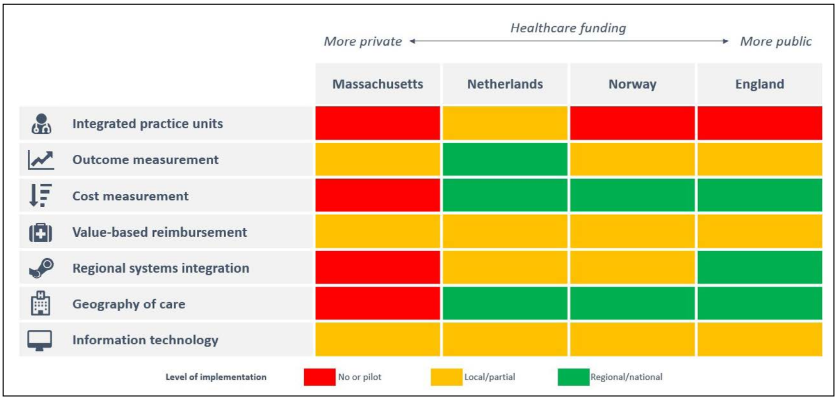
The project aimed to explore how VBHC is implemented across different healthcare systems and to assess its impact on payment models, patient engagement, and quality improvement. The key research objectives were:

- To analyze and compare VBHC adoption in four different health systems: Massachusetts, the Netherlands, Norway, and England (1).
- To assess the effectiveness of bundled payments in spinal surgery for cost control and quality improvement (2).
- To understand why U.S. hospital executives invest in Patient-Reported Outcome Measures (PROMs) despite limited direct financial incentives (3).
- To identify key facilitators and barriers to PROM implementation in leading U.S. hospitals (4).

Findings and Contributions

VBHC Implementation Across Health Systems

As illustrated in Figure 1, this study of four health systems found significant variation in how VBHC principles were adopted (1). While the U.S. focused on moving away from fee-for-service models, European countries prioritized care coordination and standardized outcome measurement. Government involvement, IT infrastructure, and provider incentives played crucial roles in shaping VBHC adoption. The research highlighted that despite widespread recognition of VBHC principles, most systems lacked a systematic approach to measuring patient outcomes. Without standardized outcome data, healthcare providers struggle to align incentives with true value creation. The research emphasized that a transition to VBHC requires a fundamental shift in how healthcare systems define and measure success.



Healthcare funding

More private ← → More public

	Massachusetts	Netherlands	Norway	England
Integrated practice units	🟥	🟨	🟥	🟥
Outcome measurement	🟨	🟩	🟨	🟨
Cost measurement	🟥	🟩	🟩	🟩
Value-based reimbursement	🟨	🟨	🟨	🟨
Regional systems integration	🟥	🟨	🟨	🟩
Geography of care	🟥	🟩	🟩	🟩
Information technology	🟨	🟨	🟨	🟨

Level of implementation 🟥 No or pilot 🟨 Local/partial 🟩 Regional/national

Figure 1. Implementation of the value-based healthcare elements in Massachusetts (USA), the Netherlands, Norway, and England (United Kingdom) as of August 2020 (1).

In all systems, the trend to move towards VBHC seemed to be mainly driven by governments, administrators, and payers. To accelerate implementation, a more proactive involvement of medical communities was found to be necessary.

Bundled Payments in Spine Surgery

Bundled payments models are a type of value-based payment system where healthcare providers receive a single, predetermined payment for all services related to a specific treatment or condition over a defined period. Instead of billing separately for each service, as in traditional fee-for-service models, bundled payments often cover all aspects of care – including rehabilitation and follow-up care.

This study examined bundled payments as a tool to reduce cost variation and enhance care quality in spine surgery (2). The research found significant cost differences across U.S. hospital regions with the highest variation stemming from index hospitalization costs and readmissions. Extending bundled payment episodes beyond 90 days had minimal additional impact on cost containment, indicating that early-phase cost control is critical. However, a key limitation of bundled payment models is the lack of integration with systematic outcome measurement, making it difficult to determine whether cost reductions translate into improved patient care.

Hospital Executives' Motivations for Investing in PROMs

Despite weak financial incentives, there is a growing trend among major U.S. hospital systems to invest in outcome measurement systems. Through interviews with hospital executives we found that the main reasons for investing in PROMs were due to institutional culture, commitment to patient-centered care, and long-term strategic positioning (3). Leaders viewed PROMs as means to demonstrate care quality to payers and improve care processes. However, they expressed concerns about using PROMs as performance metrics due to data collection challenges and physician buy-in. The research also revealed that while many institutions collect PROMs, they often fail to utilize the data effectively for quality improvement or reimbursement alignment.

Facilitators and Barriers to PROM Implementation

Since systematic outcome measurement remains underdeveloped in many health systems, understanding how leading institutions have successfully implemented PROMs in clinical practice is crucial. This study identified three key facilitators from hospitals with well-established PROM programs (4):

- clinician-driven selection of PROMs
- integration with electronic health records
- effective patient engagement strategies.

Barriers included variability in provider engagement, technical challenges in data analysis, and misalignment between PROM collection and reimbursement structures. A major challenge remains the lack of standardized frameworks for PROMs implementation and data utilization.

Impact and Reflections

National and International Influence

The four studies have been widely cited in international peer-reviewed journals (>100 times as of April 1, 2025) contributing to discussions on how to promote VBHC. In recent years, PROM cutoff scores have been applied to measure post-surgery improvement in the Norwegian quality registry online portal (5). One of these benchmarks originated from a publication made during my Harkness year in collaboration with an institute at Harvard University (6).

Career Impact and Collaborations

The fellowship experience facilitated collaborations with leading U.S. health policy researchers, leading to continued research engagements and collaboration on publications and seminars. The spring 2025 semester, a Norwegian Fulbright scholar will work at the Computational Neuroscience Outcomes Center at Brigham and Women's Hospital, made possible through my ongoing collaboration with the institution.

The Harkness Fellowship also created new pathways for leadership in digital health and healthcare transformation, influencing both my tenure as Deputy CEO and CCIO at Helseplattformen AS and my subsequent transition to a Partner role at EY. Exposure to U.S. policy discussions has informed my approach to implementing VBHC principles in Nordic healthcare settings, particularly in advancing systematic outcome measurements and driving digital transformation processes.

As part of the 2024 Norwegian Washington Seminar (7), a collaboration with the Commonwealth Fund resulted in a dedicated one-day session addressing the challenges of the U.S. healthcare system. I hope to continue this collaboration on a biannual basis moving forward.

Future Research and Policy Directions

Building on these findings, future research should:

- Investigate the long-term impact of PROMs on patient outcomes and cost-efficiency.
- Develop robust frameworks for better integrating PROM data into reimbursement models to align financial incentives with value-based care principles.
- Establish standardized methodologies for collecting and utilizing PROMs to ensure that patient outcomes are systematically measured and used to drive healthcare improvements.
- Assess how systematic outcome measurement can enable broader healthcare system improvements.

Conclusion

The research conducted during the Harkness Fellowship underscores the complexities of implementing VBHC across diverse health systems. While significant progress has been made, challenges remain in aligning payment models, standardizing outcome collection, and engaging both providers and patients. The absence of comprehensive outcome measurement continues to hinder true value creation in healthcare. To fully realize the potential of a value-based approach, healthcare systems must prioritize the adoption of standardized PROMs frameworks, embed outcome measurement into payment models, and utilize data-driven insights for continuous improvement.

Sustained policy innovation and cross-country learning will be essential in advancing the VBHC agenda globally. Additionally, a more focused governmental ambition and active involvement will be critical in shaping meaningful reforms. In this regard, future Harkness fellows can play an important role in promoting a stronger focus on patient value in international health care.

Literature

1. Mjåset C, Ikram U, Nagra NS et al. Value-Based Health Care in Four Different Health Care Systems. *NEJM Catalyst* 2020. doi: 10.1056/CAT.20.0530
2. Dalton MK, Mjåset C, Manful A et al. Strategies for spinal surgery reimbursement: bundling in the working-age population. *BMC Health Serv Res* 2012; 112. https://doi.org/10.1186/s12913-021-06112-0
3. Mou D, Mjåset C, Sokas CM et al. Impetus of US hospital leaders to invest in patient-reported outcome measures (PROMs): a qualitative study. *BMJ Open* 2022; 12: e061761. doi: 10.1136/bmjopen-2022-061761

4. Hyland CJ, Mou D, Virji AZ et al. How to Make PROMs Work: Qualitative Insights from Leaders at US Hospitals with Successful PROMs Programs. *Quality of Life Research* 2023; 32: 2259–2269. doi: 10.1007/s11136-023-03388-z
5. *Nasjonale medisinske kvalitetsregistre*. www.kvalitetsregistre.no (21.3. 2025)
6. Mjåset C, Zwart J-A, Goedmakers CMW et al. Criteria for success after surgery for cervical radiculopathy – estimates for a substantial amount of improvement in core outcome measures. *Spine Journal* 2020; 20: 1413–1421. doi: 10.1016/j.spinee.2020.05.549
7. *Washingtonseminaret*. www.washingtonseminaret.no (21.3. 2025)

Christer Mjåset
chrmja@gmail.com
Division of Clinical Neuroscience
Department of Research and Innovation
Oslo University Hospital
P.O. Box 4956 Nydalen
0424 Oslo, Norway.

Christer Mjåset is currently a Nordic Partner at EY and academically affiliated with Division of Clinical Neuroscience, Department of Research and Innovation at the Oslo University Hospital.

Ane-Kristine Finbråten

There are no hard-to-reach patients – only hard-to-reach health care

Michael 2025; 22: 73–78.
doi: 10.56175/Michael.12587

In high-income countries, hepatitis C mainly affects people who inject drugs. Achieving WHO targets for HCV elimination requires alternative care models to effectively engage vulnerable populations in treatment. HCV can be effectively cured with antiviral treatment; however, barriers such as stigma, unstable housing, and complex healthcare systems often hinder access to this treatment. While exploring low-threshold HCV care models in New York City through the Harkness Fellowship, healthcare providers highlighted the importance of building trust and offering comprehensive services. Engaging with vulnerable populations requires a shift in our approach—meeting people where they are and dismantling the logistical and social barriers that hinder their access to treatment is essential. Our focus should be enhancing coordination and providing care in easily accessible locations that resonate with those we aim to serve.

In high-income countries like Norway and the United States, the Hepatitis C virus (HCV) disproportionately affects people who inject drugs. These individuals are often marginalized due to their ongoing drug use, psychiatric comorbidities, health illiteracy, or socioeconomic instability. While some attempt to seek treatment, they often become lost within a complex system that is not designed to meet their needs. Others might resist help altogether, sometimes because of traumatic life experiences that are challenging to imagine. All deserve our respect and care.

Newer antiviral medications, which are taken for eight to twelve weeks, can cure approximately 95% of patients with HCV, making the elimination of hepatitis C as a public health threat feasible. However, helping people who inject drugs obtain and adhere to treatment presents significant challenges and barriers to care.

To achieve HCV elimination, we need alternative models of care that effectively engage vulnerable populations in treatment. How do we reach patients who do not have a permanent address or phone? How can we follow up with individuals who miss regular appointments? These questions occupied my thoughts prior to starting the Harkness Fellowship.

Delivering more effective HCV care

As a founding member of the Centre for Elimination of Hepatitis in Norway, I have worked with innovative HCV treatment models for people who inject drugs. One such model was a mobile clinic run by peers, targeting people who inject drugs living in rural areas of Norway (1). This clinic offered point-of-care confirmatory hepatitis C testing and liver assessments using portable devices, creating opportunities to initiate same-day treatment with a provider accessible via telephone. Another model involved providing immediate treatment for hospitalized people who inject drugs with HCV, as opposed to the traditional standard of care that involves referral to an outpatient clinic (2).

The primary goal of my fellowship was to explore HCV treatment models in New York City, specifically examining barriers to care and identifying elements of care models that effectively address these challenges. While significant structural and cultural differences in healthcare exist between Norway and the US, the HCV population faces similar needs in both countries, offering an opportunity for healthcare professionals to learn from one another in delivering more effective HCV care to marginalized populations.

Insights from HCV care models in New York City

From 2021 to 2022, I conducted interviews with 16 healthcare providers in New York, representing ten different organizations that deliver low-threshold HCV treatment (3). These organizations include community health centers, mobile units, harm reduction programs, and methadone clinics, with significant peer involvement in the treatment process.

Competing priorities

I found that many barriers to HCV care are similar in the US and Norway. Stigma associated with substance use disorder, along with competing personal factors such as lack of housing and ongoing substance abuse, are prevalent regardless of nationality. The term "chaos" often comes to mind; it can be difficult to initiate HCV treatment when individuals face numerous pressing problems.

Low-threshold HCV programs

While no clear definition of a low-threshold care model exists yet, discussions with providers in New York City-based programs revealed that these initiatives must work to overcome the stigma associated with the disease. Successful HCV treatment hinges on building trust with patients. An open-door policy, where appointments are not required, is another key success factor for low-threshold programs. The more services these programs can provide in one location, the better. For example, why not address patients' wounds and manage their diabetes while simultaneously treating their HCV infection?

Another effective approach involves locating healthcare services close to the marginalized patients who need them. One example is the Accessible Care Program, which co-locates an HCV care program within a syringe exchange program in New York City (4).

Staffing is a crucial component

Care models can significantly enhance outreach efforts and improve care coordination through adequate staffing. It is essential to bring healthcare to areas where it is most needed, ensuring patients have various options for connection—whether through walk-ins, telemedicine, or outreach activities.

Available but not accessible

One major barrier to HCV care in the US, absent in Norway, is the requirement for prior authorization, or insurance approval, before starting treatment (5). These additional steps can quickly lead patients to drop out of care. Imagine a motivated patient eager to receive HCV treatment, only to be delayed by the need for prior authorization. For patients without stable housing or access to a phone, ensuring they receive medication once authorized can be exceptionally challenging.

In the US, while HCV treatment is available, it is not accessible for all patients and it needs to be both. One way to address prior authorization challenges is to assign peer navigators to assist patients in obtaining necessary care. Another approach could involve providing patients with a medication starter pack while they await their prescription (6).

Is there an optimal treatment model?

My experience at the Centre for Elimination of Hepatitis in Norway, combined with my fellowship year, provided invaluable insights into the essential elements for an optimal treatment model that can overcome barriers to HCV care. Together with my mentors, we published a comprehensive review on this topic, highlighting effective strategies and innovations that significantly enhance access to treatment for marginalized populations (7). We aim to contribute to a better understanding of how to engage and support individuals affected by hepatitis C, ultimately advancing the goal of elimination.

We concluded that rapid treatment initiation is a promising approach to increasing HCV treatment uptake among marginalized populations. Rapid models rely on innovations in HCV diagnosis and treatment, such as point-of-care confirmatory testing, decentralized treatment locations, and simplified treatment algorithms. Access to medication remains a significant barrier, and these rapid models are best suited for environments where medication is readily available. Addressing medication access issues and expanding point-of-care testing methods could facilitate broader implementation.

A new treatment model in Norway

During my fellowship year, I participated in a task force that updated the national guidelines for treating hepatitis C in Norway. A new model was incorporated into the Norwegian HCV treatment guidelines in June 2022 (8). Traditionally, Norway's approach has involved referring patients to outpatient care, often leading to delays and missed appointments. In the updated guidelines, we recommend that if a patient tests positive for hepatitis C and is unlikely to benefit from the traditional treatment model, healthcare providers should simplify the process and initiate rapid treatment. This method has proven both safe and efficient, with a primary focus on engaging people who inject drugs and ensuring they receive necessary care without unnecessary barriers.

Transforming health care to meet the needs of a vulnerable population

Norway's healthcare system, with its strong emphasis on accessibility and comprehensive support, facilitates the effective implementation of treatment models for hepatitis C. In contrast, the US healthcare system poses significant challenges to such implementation, due to complexities like varying state regulations and the requirement for insurance approval, which can impede access to treatment for marginalized populations. A failing safety net limits the success of low-threshold HCV care models.

In exploring the challenges associated with public health initiatives, particularly concerning hepatitis C elimination, it is crucial to consider the insights of healthcare professionals who are engaged directly in the system.

One provider I interviewed in New York expressed deep skepticism about the feasibility of achieving elimination due to systemic issues within their healthcare framework. They stated, "I'm skeptical that elimination will be achieved. And it's partly because we don't believe that people have a right to basic healthcare, housing, or mental health care. We lack universal healthcare, and, at least in the short term, we probably never will. I think Hep C elimination in the United States or New York is not possible without a comprehensive restructuring of our healthcare system."

This perspective highlights a significant barrier to public health progress: comprehensive healthcare reforms must tackle the underlying inequalities that hinder effective disease elimination strategies.

Transforming healthcare requires grit — a determination to persevere when faced with complex challenges. While some may be born with grit, it can also be cultivated through life experiences.

By uprooting my life and moving to New York City for a year, I left with more grit than I had upon arrival. The shift from Norway, with a total population of 5.5 million, to the bustling environment of New York City, with 8.8 million residents, was substantial. Gaining firsthand knowledge from a different healthcare setting has enriched my perspective. I witnessed remarkable determination and resilience in communities that deliver care to vulnerable populations in New York City. I learned from innovative care models run by engaged and compassionate providers who are working against structural barriers.

No one has yet devised a perfect HCV care model that can be implemented universally across all healthcare systems. We must continue sharing problems and solutions; this knowledge is key to innovation and change. Healthcare will improve as we address each barrier one at a time.

Literature

1. Midgard H, Bjørnestad R, Egeland M et al. Peer support in small towns: A decentralized mobile Hepatitis C virus clinic for people who inject drugs. *Liver Int* 2022; 42: 1268–1277.
2. Midgard H, Malme KB, Pihl CM et al. Opportunistic Treatment of Hepatitis C Infection Among Hospitalized People Who Inject Drugs (OPPORTUNI-C): A Stepped Wedge Cluster Randomized Trial. *Clin Infect Dis* 2024; 78: 582–590.
3. Finbråten AK, Chin CL, Seetharaman M et al. Providers' Perspectives on Implementation of Low-threshold HCV Treatment in New York State: A Qualitative Study. *Open Forum Infect Dis* 2025; 12: ofaf184.
4. Eckhardt BJ, Scherer M, Winkelstein E et al. Hepatitis C Treatment Outcomes for People Who Inject Drugs Treated in an Accessible Care Program Located at a Syringe Service Program. *Open Forum Infect Dis* 2018; 5: ofy048.

5. Duryea P, Habchi J, Sprecht-Walsh S et al. A Modifiable Barrier to Hepatitis C Virus Elimination in Rhode Island: The Prior Authorization Process for Direct-Acting Antiviral Agents. *R I Med J* (2013). 2020; 103: 41–44.
6. Eckhardt B, Kapadia SN, Mateu-Gelabert P, et al. Rapid Treatment Initiation for Hepatitis C in Young People Who Inject Drugs: The Seek, Test, and Rapid Treatment Randomized Trial. *Open Forum Infect Dis* 2022; 9: ofac225.
7. Finbråten AK, Eckhardt BJ, Kapadia SN et al. Rapid Treatment Initiation for Hepatitis C Virus Infection: Potential Benefits, Current Limitations, and Real-World Examples. *Gastroenterol Hepatol (N Y)* 2022; 18: 628–638.
8. *Faglig veileder for utredning og behandling av HEPATITT B og C hos voksne*. Oslo: Den norske legeforening, 2022 https://www.hepatittfag.no/ (17.6.2025)

Ane-Kristine Finbråten
ane-kristine.finbraten@fhi.no
Lovisenberggata 8
0456 Oslo

Ane-Kristine Finbråten is an internist currently serving as a senior physician within the Department of Infection Control and Vaccines at the National Public Health Institute (NIPH).

Hanne Marie Rostad

No data, no justice: The need to study health disparities in municipal long-term care

Michael 2025; 22: 79–84.
doi: 10.56175/Michael.12588

This essay highlights the urgent need for comprehensive data collection to address health disparities in Norway's municipal long-term care services. Inspired by the United States, where extensive research has revealed significant health disparities, this essay emphasizes the importance of understanding these issues in Norway. Effective interventions for equitable healthcare cannot be developed without detailed data on, for example, race, ethnicity, and socioeconomic status. The essay also discusses challenges in data collection, such as privacy concerns and universalism, policy and practice changes, and future research initiatives to overcome these barriers.

Imagine Mrs. Johnson, an African American woman in her 70s living in a long-term care facility in the *United States*. Mrs. Johnson suffers from pressure ulcers, a condition that causes her significant discomfort and pain. Through comprehensive data collection on race and ethnicity across all US nursing homes, it was discovered that African American residents had higher rates of pressure ulcers compared to White residents. This crucial insight led to heightened awareness and targeted interventions, such as improved staff training and culturally appropriate care practices. As a result, the incidence and prevalence of pressure ulcers among African American residents were significantly reduced, improving overall quality of life.

In Norway, we currently lack similar data collection, which means we might be missing out on identifying and addressing such disparities within our own healthcare system.

Going to the *United States*, I wanted to learn how to study health disparities in long-term care. The U.S has a long and strong history of studying health disparities and has placed significant focus on this issue, especially over the past two decades. The COVID-19 pandemic, in particular, accelerated research in this area. The term 'health disparity' describes differences in access to healthcare and health outcomes between different population groups. These disparities can be measured and often highlight the unequal burden of disease, disability, death, and the quality of healthcare among specific groups (1).

Much of the research on health disparities in long-term care has been conducted in the *United States*. Although the political situation, social challenges, cultural, and historical contexts are different, countries like Norway can still learn valuable lessons from US health disparities research. The experiences of conducting disparities research and the data infrastructure in the US provide valuable insights that we need in Norway to advance our understanding and address health disparities effectively.

Research on health disparities is not just about statistical observations; it often presents living narratives of systemic injustice. There is no reason to believe that health disparities do not or will not occur in Norway. The reality is that our understanding of health disparities in Norway is still developing. While there is some research into disparities in mortality and access to and utilization of certain healthcare services, primarily related to specialist healthcare, we lack comprehensive knowledge about the extent of health disparities in our healthcare services in general. In this essay, I focus on municipal long-term care services, which is my area of research. We know very little about where, when, and how these disparities manifest, why they occur, and what the consequences are for different groups.

Rising need for municipal care services amid Norway's growing diversity

Norwegian municipal long-term care services are vital for the population's well-being. In 2020, 7% of the population received these services, and that number is rising (2). As the demographic landscape diversifies, these services face greater responsibility for a more complex population. For example, the number of immigrants over 80 could quadruple in the next 20 years, many of whom will have low educational levels linked to higher care needs (3). Therefore, understanding and addressing health disparities, care quality, and service utilization among diverse groups is increasingly important.

The US experience in disparities research and data infrastructure offers valuable insights for Norway. A key component is the Minimum Data Set (MDS), a standardized tool for collecting comprehensive data in long-term care facilities. The MDS includes crucial variables like demographics, health status, and social factors, with recent expansions in ethnicity and race categorization to promote health equity and aid in identifying health disparity patterns and develop targeted interventions.

Barriers to comprehensive data collection in Norway

One significant challenge in studying health disparities in Norway is the lack of comprehensive and systematic data collection on variables that can be used to analyze health disparities, such as race, ethnicity, disabilities, sexual orientation, income, and educational level. This gap in data hinders our ability to fully understand and address the health needs of a diverse population. One reason we often avoid collecting detailed data is the concern for privacy. While privacy is undoubtedly important, and protecting personal information is a fundamental right, we must also consider the implications of not having this data. If privacy concerns prevent us from collecting information crucial for providing appropriate treatment, care, and support, we are failing to meet the needs of our diverse population. Diaz, Magnus, and Ursin argue that we should not need to compromise on privacy but rather find a balance between protecting personal information and collecting data essential for improving care quality (4).

Additionally, concerns about discrimination and the principle of universalism may lead to the perception that it is unnecessary to collect such data, as everyone should be treated equally. In Norway, like in many other countries, there is a strong emphasis on ensuring equality and preventing discrimination based on race, ethnicity, or religion. Avoiding the collection of data on race and ethnicity has likely been a way to prevent these factors from being used to discriminate and create negative associations towards subpopulations in our society.

The need for comprehensive data

The first step towards meaningful change is the collection of data. As a registered nurse, it is second nature for me to think in terms of the nursing process, where data collection is the initial phase of a problem-solving methodology. We need data first, followed by the interpretation of the collected data to formulate a problem statement. Only then can interventions be planned, implemented, and evaluated. Currently, we are in the initial stage of this problem-solving process for addressing health disparities in municipal long-term care. Without comprehensive data, we cannot accurately identify the issues or develop effective solutions. Therefore, the collection of data is not just a technical necessity but a foundational element in our efforts to promote access, equity, and high-quality care and a responsive healthcare system. To effectively study health disparities in long-term care in Norway, we need to start collecting comprehensive data in the 'Kommunalt pasient- og brukerregister' (Municipal Patient- and Service User Registry) that reflects the diversity of our population, in a standardized and systematic way.

Policy, practice and research

To ensure responsible data collection and enhance the quality of care for all individuals, robust privacy protection policies are essential. While Norway already has implemented some of these measures to a certain extent, it is crucial to continuously discuss and advance the ways we balance data collection needs with personal information protection. For example, strict data security measures like encryption, multi-factor authentication, restricted access, regular audits, and transparency about data usage and protection should be emphasized. Furthermore, engaging stakeholders, including civil society organizations, ensures that the collected data is relevant, accurate, transparent, and aligned with societal goals. This collaborative approach is likely to lead to better outcomes and more informed decision-making.

Both clinicians and researchers should receive mandatory continuous training in handling sensitive data. This training would cover best practices for data security, privacy protection, and ethical considerations in data collection and usage. By ensuring that everyone involved understands the importance of protecting personal information, we can still collect the necessary data to improve care quality.

Providing health researchers with easier and more affordable access to data while ensuring that the information is relevant and sufficiently detailed is essential. For example, aggregating data in a meaningful way is crucial; it must be done at a level that protects privacy while still providing valuable insights. Over-aggregation, such as combining data from individual countries into broad regions, can render the data less useful. Furthermore, establishing clear guidelines and standards for the collection of health data, including race, ethnicity, and other demographic variables, ensures consistency and accuracy across all healthcare facilities. Additionally, introducing legislation that mandates the collection of specific health data variables, such as race and ethnicity, in all healthcare settings is crucial.

Key themes for future research on health disparities

Through my project, several overarching themes emerged that are crucial for future research on health disparities in long-term care (5). To truly address these disparities, future research needs to move beyond merely acknowledging that they exist and delve into the underlying structures, processes, and policies that contribute to these inequities. Understanding how and why these disparities arise and persist is crucial for developing effective interventions. A significant challenge I identified is the predominant focus in previous research on single-axis differences, such as race or gender, which overlooks the complex interplay of multiple identity dimensions. The concept of intersectionality could be promising here, as it encourages us to consider how various social categories intersect and influence health outcomes. Researchers should also examine the broader social, economic, and political contexts that affect these disparities and engage with the communities being studied to ensure the research is relevant and respectful. In addition to quantifying health disparities, it is essential to explore experiences through qualitative research. This approach can provide deeper insights into how individuals perceive their care, helping to tailor interventions more effectively (5).

Towards a healthier and more inclusive society

In summary, tackling health disparities in municipal long-term care through comprehensive data collection and analysis is no small feat. However, it is a game-changer. It allows us to build a healthcare system that truly responds to the diverse needs of our population. By putting privacy protection and transparency at the forefront, we can earn the public's trust and ensure sensitive data is handled with the utmost care. This initiative is not really about data—it is a commitment to justice and equality in healthcare. It is our chance to lead by example, showing how thoughtful and inclusive data practices can spark positive change. Collecting data will provide us with the opportunity to improve the health of various groups and individuals, making sure that everyone, including all the Norwegian Mrs. Johnsons, receives the attention they need.

Impact of the Harkness experience on my career

Reflecting on my fellowship year, I didn't just gain new knowledge and skills about disparities research—I acquired a whole new perspective on leadership. Before heading to the United States, I thought leadership was about big decisions and grand gestures, but I learned that true leadership lies in the everyday actions and interactions—sharing knowledge, offering resources, and helping others shine. This revelation transformed my approach to work, making collaboration and inclusivity my mantra.

Meeting with colleagues from various nations made it clear how universal our healthcare challenges are. We were all grappling with the same issues, albeit in different contexts. Diving deep into the US healthcare system was like a masterclass in innovation, and I realized that many of their solutions could be adapted to our settings. This experience underscored the importance of global collaboration and how interconnected our efforts are in tackling healthcare problems.

Being a Harkness Fellow was like getting a golden ticket to a world of opportunities. The network is a powerhouse of collaboration and idea-sharing. While achieving change is tough and complex, witnessing the determination and innovation in the US was incredibly inspiring. It showed me the magic that happens when diverse perspectives come together and the sheer power of collective effort.

Literature

1. Ndugga N, Artiga S. Disparities in Health and Health Care: 5 Key Questions and Answers: Kaister Family Foundation; 2024 https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/ (29.4.2025)
2. Helsedirektoratet [The Norwegian Directorate of Health]. Kommunale helse- og omsorgstjenester 2020 [Municipal long-term care 2020]. https://www.helsedirektoratet.no/rapporter/kommunale-helse-og-omsorgstjenester-2020/Kommunale%20helse-%20og%20omsorgstjenester%202020.pdf/_/attachment/inline/0794d739-d96e-42cb-ac7a-52a059ccabd1:5a96b4fc833c906ecac232821961dc52f1345891/Kommunale%20helse-%20og%20omsorgstjenester%202020.pdf (28.4.2025).
3. Syse A, Tønnessen M. Flere eldre innvandrere blant framtidens brukere av omsorgstjenester [A Larger Share of Future Long-Term Care Service Users Will Be Immigrants] *Tidsskrift for omsorgsforskning* 2022; 8: 8-29. https://doi.org/10.18261/tfo.8.2.2
4. Diaz E, Magnus J, Ursin G. La oss sette innvandrere i bås – slik at vi alle får bedre helsetjenester [Let us categorize immigrants – so that we all receive better healthcare services]. *Aftenposten* 21.9.2017. https://www.aftenposten.no/meninger/kronikk/i/7W8Pw/la-oss-sette-innvandrere-i-baas-slik-at-vi-alle-faar-bedre-helsetjenester-esperanza-diaz-jeanette-h-magnus-giske-ursin (28.4.2025)
5. Rostad HM, Xiang L, White EM. Methods for studying health disparities in U.S. nursing homes: a scoping review. *BMC Health Serv Res* 2025; 25: 1117 https://doi.org/10.1186/s12913-025-13071-3

Hanne Marie Rostad
hanne.m.rostad@ntnu.no.
Teknologivegen 22
2815 Gjøvik

Hanne Marie Rostad is Researcher at the Center for Care Research

Iselin Dahlen Syversen

A comparative analysis of international drug price negotiation frameworks

Michael 2025; 22: 85–89.
doi: 10.56175/Michael.12589

The Inflation Reduction Act marked a significant policy shift in the United States, granting Medicare the authority to negotiate prices for high-cost brand-name prescription drugs. While many other industrialized nations have long utilized negotiation frameworks, this study aimed to compare these processes across various health systems, focusing on key aspects such as drug selection criteria, negotiation procedures, price-influencing factors, and implementation (1).

My study analyzed the negotiation frameworks of four G7 countries – Canada, France, Germany, and the United Kingdom (England) – two Benelux countries (Belgium and the Netherlands), and one Scandinavian country (Norway), all of which have well-established drug price negotiation models. The U.S. Veterans Affairs Health System was also included for comparison.

The study concludes that the negotiation framework established under the Inflation Reduction Act is far more limited than other frameworks explored in this study. Adding elements from frameworks in other countries could lead to more effective price negotiation in the United States.

Prices for brand-name prescription drugs in the United States are approximately two to four times higher than prices in other comparable countries (2). A key reason for the price differential is that high-income countries apart from the United States negotiate drug prices with manufacturers shortly after market launch, whereas the United States allows pharmaceutical manufacturers to set prices without restriction when entering the market. The Inflation Reduction Act (IRA) of 2022 authorizes the Centers for Medicare and Medicaid Services (CMS) for the first time to negotiate prices for a limited selection of high-revenue brand-name prescription drugs on behalf of Medicare (3). In 2023, CMS released comprehensive guidance on negotiation plans, which covered the selection of drugs, negotiation procedures, and timelines for implementation (4). For example, qualifying drugs must be single-source brand-name drugs or biological products lacking marketed generic or biosimilar competition and will be eligible for negotiation beginning seven years after Food and Drug Administration approval for small molecule drugs (11 years for biologics), with the negotiated price taking effect two years later (5).

Many health care systems around the world negotiate drug prices using a range of methods to ensure the affordability of prescription drugs. The objective of the study was to compare various negotiation frameworks to identify their strengths and weaknesses. Four main areas were covered:

1. Criteria for selecting drugs for price negotiations (what factors)
2. Procedures for negotiations (structure, timelines, consequences of not reaching an agreement)
3. Factors that influence negotiated prices (how defined and what sources)
4. Implementation of the negotiated prices (how distributed in the supply chain, discrepancies between transaction price vs. negotiation price, price changes over time).

Semi-structured interviews were conducted with in-country experts in each system who have knowledge and first-hand experience in pharmaceutical price negotiations. For each system, relevant legislation, government publications, and guidelines were also gathered to understand the context of the negotiation frameworks.

Findings

All eight systems negotiate the prices of brand-name prescription drugs soon after approval and rely on formal clinical assessments that compare newly approved drugs with existing therapies. Systems differed on characteristics such as whether the body performing clinical assessments is separate from the negotiating authority, how added health benefit is assessed, whether explicit willingness-to-pay thresholds are employed, and how specific approaches for priority disease areas are taken.

High-income countries around the world adopt different approaches to conducting price negotiations on brand-name drugs but coalesce around a set of practices that are largely absent from the current Medicare negotiation framework. U.S. policymakers might consider adding some of these characteristics in the future to improve negotiation outcomes.

Impact nationally and internationally

Countries around the world have developed sophisticated systems to negotiate drug prices effectively, and the findings in the study suggest that there is much the U.S. can learn from these established frameworks. Unlike other high-income countries, the U.S. lacks formal health technology assessments (HTAs), which have been key in strengthening drug price negotiations elsewhere. When price negotiations take place at market entry, it ensures quicker and longer-lasting savings by setting affordable prices. Many health systems negotiate prices as drugs are approved, enabling immediate, cost-effective access. In contrast, Medicare can only begin negotiations seven to 11 years after FDA approval, allowing manufacturers to set high prices for years. While this delay supports industry profits and incentivizes innovation, it results in higher drug costs and slower access to affordable treatments for patients. Implementing strategies from other countries could significantly improve negotiation outcomes for Medicare and ultimately benefit American patients.

Beginning in January 2025, the European Union (EU) will adopt a standardized framework for clinical assessment of newly approved drugs (6). The framework for joint clinical assessment will be implemented across member states in stages, beginning first with oncology drugs and advanced therapies, such as gene therapies. The process will run in parallel with the regulatory review process; when manufacturers submit market authorization applications to the European Medicines Agency, they will provide information at the same time to a European Commission secretariat to inform the HTA process. Member states are obliged to include the joint clinical assessment in their national HTA review (along with additional clinical analyses they may choose to undertake) and will each complete their own cost-effectiveness analyses, price negotiations, and reimbursement decisions. This centralized joint clinical assessment process may help standardize evaluations of new therapies. A more uniform drug assessment process may be especially important given the challenges countries face in addressing uncertainty in clinical evidence and the increasing number of drugs approved based on nonrandomized trials, single-arm studies, surrogate measures as study endpoints, and short follow-up times.

Impact on my career

Equity in health has been one of my main motivations for pursuing further education and has continued as a guiding star throughout my career. The fellowship has been a unique opportunity to join a community of people from across the world. They have inspired me to see new opportunities to advance health policy on equitable access to medicines and health care.

The need for international knowledge sharing and exchange of experiences is becoming more critical in the coming years to ensure access to medicines and health care. Given the current geopolitical landscape, enhancing cross-border public health policies is more important than ever. The initiative of the European Health Union highlights the importance of a more unified and prepared approach to ensure access to medicines and medical technology, collaboration on health preparedness and crisis response, and reinforcing healthcare infrastructure. The Harkness experience has given me a deeper understanding of the changes needed today to address the challenges of health care in the future. International collaborations as a strategic platform and mechanism to advance policy changes are something I will continue to build upon in my career.

Future Research

The study did not include comprehensive data on access to medications or drug spending in each system, which restricted the ability to assess the overall performance of different negotiation frameworks. The study focused on the processes and procedures that shape drug price negotiation. However, there are numerous exogenous factors, including how societies value health and how much countries can afford to pay, that may affect final agreed-on prices. Additionally, although interviewees underscored the primary importance of added therapeutic benefit and the certainty of evidence in drug price negotiations, they were not asked to formally rank different factors. Future research should quantify how officials (and the frameworks in which they operate) trade off different values when negotiating prices.

Literature

1. Syversen ID, Schulman K, Kesselheim AS et al. A Comparative Analysis of International Drug Price Negotiation Frameworks: An Interview Study of Key Stakeholders. *Milbank Quarterly*. 2024; 102:1004–1031. doi: 10.1111/1468-0009.12714.
2. OECD. *Pharmaceutical spending*. https://data.oecd.org/healthres/pharmaceutical-spending.htm (3.6.2024)
3. *Inflation Reduction Act of 2022*. HR 5376, 117th Congress (2021-2022). https://www.congress.gov/bill/117th-congress/house-bill/5376/text (3.6.2024)
4. Centers for Medicare and Medicaid Services. *Medicare drug price negotiation*. Updated August 15, 2024. https://www.cms.gov/inflation-reduction-act-and-medicare/medicare-drug-price-negotiation (3.6.2024)
5. Centers for Medicare and Medicaid Services. *Medicare drug price negotiation program: revised guidance, implementation of sections 1191–1198 of the Social Security Act for*

Initial Price Applica-bility Year 2026. 2023. https://www.cms.gov/files/document/revised-medicare-drug-price-negotiation-program-guidance-june-2023.pdf (3.6.2024)

6. European Parliament. *Regulation (EU) 2021/2282 of the European Parliament and of the Council of 15 December 2021 on health technology assessment and amending Directive 2011/24/EU (Text with EEA relevance).* 2021. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R2282 (3.6.2024)
7. *Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL laying a framework for strengthening the availability and security of supply of critical medicinal products as well as the availability of, and accessibility of, medicinal products of common interest, and amending Regulation (EU) 2024/795* https://health.ec.europa.eu/document/download/2abe4fc8-059e-47d9-a20a-d9e3bfc5dc2c_en?filename=mp_com2025_102_act_en.pdf (16.3.2025)
8. Norwegian Ministry of Health and Care Services. *Principles for priority setting in health care: summary of a white paper on priority setting in the Norwegian health care sector.* 2017. https://www.regjeringen.no/contentassets/439a420e01914a18b21f351143ccc6af/en-gb/pdfs/stm201520160034000engpdfs.pdf (8.5.2024)

Iselin Dahlen Syversen
Iselin.syversen@gmail.com
Norwegian Hospital Procurement Trust
N-0151 Oslo, Norway

Iselin Dahlen Syversen is Head of Negotiation Department novel drugs and new technologies, Norwegian Hospital Procurement Trust

Jacob Jorem

Using telemedicine and mobile crisis teams to improve mental health care access: Exploring U.S. policies and their relevance to Norway

Michael 2025; 22: 90–96.
doi: 10.56175/Michael.12590

Improving access to mental health care is a shared policy priority in both Norway and the United States, particularly addressing access barriers in rural areas. Telemedicine and crisis response systems have gained importance in these efforts, having the potential to expand timely access to care.

The adoption of telemedicine has increased significantly in recent years. However, the impact of telemedicine on clinicians' geographic reach remains unclear, especially in rural areas. One of my Harkness Fellowship projects addressed this gap by analyzing Medicare data to assess the geographic reach of mental health specialists adopting telemedicine.

Mobile Crisis Teams (MCTs) have become crucial in U.S. mental health crisis response systems, supported by recent federal policies increasing their Medicaid funding. However, there is limited knowledge about how this funding has affected access to care. My second Harkness project explored the implementation of Medicaid-funded MCTs in selected U.S. states.

Findings from both projects aim to inform researchers and policymakers internationally. The Harkness Fellowship has provided valuable interdisciplinary perspectives on health policy and leadership, shaping my future research and policy efforts aimed at strengthening public health care systems.

Timely access to mental health care remains an international challenge. Both Norway and the United States display geographic variations in the availability of mental health care providers, particularly in rural areas. Patients may need to travel long distances for care and often encounter lengthy wait times. While primary care physicians can address some mental health needs, access to community-based specialists is limited in many areas. This service gap increases reliance on law enforcement, emergency departments, and hospitalizations, highlighting the urgent need for more accessible mental health care (1, 2).

Unlike Norway's publicly funded universal health care system, access to care in the U.S. typically depends on employer-sponsored insurance or public programs such as Medicare and Medicaid. Medicare, a federally funded program, covered approximately 67 million Americans in 2024, including those aged 65 and older, as well as younger individuals with disabilities and certain medical conditions. Medicaid, a joint federal-state program, provided health care for about 72 million low-income Americans in 2024, many of whom experienced mental health issues or substance use disorders. The federal structure allows states the flexibility to tailor services to local needs, but it also contributes to variations in mental health care provision across U.S. states (3). Medicaid beneficiaries often face barriers in accessing timely mental health care, including variations in state-covered services, provider reluctance to accept Medicaid patients, and disparities in access between urban and rural areas. While the Affordable Care Act of 2010 expanded mental health coverage by mandating essential health benefits, many Americans remain uninsured or underinsured – particularly in the ten states that have not expanded Medicaid since 2010.

As a Harkness Fellow, my projects explored health policies aimed at improving mental health access through U.S. public insurance programs. Telemedicine and crisis response services have become increasingly important in addressing access barriers in recent years. Telemedicine offers a remote alternative to in-person care that can potentially improve access, especially in rural and underserved communities. Similarly, Mobile Crisis Teams (MCTs) are crucial for providing community-based interventions for individuals in mental health crises (4). Both Medicare and Medicaid serve as primary funding sources for these services. Despite their different health care systems, understanding policies to improve access within U.S. public insurance programs can provide valuable policy insights for Norway's health care system.

This article provides an overview of my two main Harkness projects: the geographic reach of mental health specialists adopting telemedicine and the implementation of Medicaid-funded MCTs across selected U.S. states. I will then discuss key lessons from my Harkness fellowship and conclude with reflections on future research and policy work.

The Geographic Reach of Mental Health Specialists via Telemedicine in Rural and Underserved Communities

Telemedicine has become increasingly important for mental health care provision and can potentially overcome geographic access barriers. The Covid-19 pandemic accelerated the adoption of telemedicine among mental health care providers (5), and research suggests that it is as effective as in-person care (6). However, studies indicate that disparities persist, with rural residents and older induviduals using telemedicine less frequently (7). Given the high demand for specialist care amid limited provider availability, clinicians may prioritize established or local patients over new or rural ones, regardless of whether care is delivered in-person or via telemedicine. No studies have assessed how telemedicine adoption influences the geographic reach of mental health specialists.

To address this gap, I led a project analyzing Medicare fee-for-service claims data from 2018 to 2023 to assess the association between telemedicine use and the geographic reach of mental health specialists, including psychiatrists, psychologists, social workers, and psychiatric nurse practitioners. Specialists were categorized into four equal groups based on their telemedicine use. Using a difference-in-differences analysis, we measured differential changes between the highest and lowest telemedicine users in the study period across four primary outcomes: the percentage of visits provided to patients living in underserved areas, rural areas, out-of-state, and more than 20 miles from the provider. A secondary outcome examined the percentage of visits with new patients. Specialists' geographic reach can increase either by seeing new patients from farther away or by existing patients moving. To explore this, we fixed patient locations to their initial zip codes in part of the analysis, ensuring that any increase in geographic reach reflected only new patients coming into practice.

The findings will be disseminated through high-impact journal publications and presented to researchers and policymakers in Norway and the United States.

Implementing Medicaid-Funded Mobile Crisis Teams Across U.S. States

MCTs are essential to crisis response systems by providing community-based interventions for individuals in mental health crises (4). These multidisciplinary teams aim to de-escalate crises in familiar environments, connect individuals to appropriate care, and reduce reliance on law enforcement, emergency departments, and hospitalizations (8). However, it remains challenging to integrate MCTs into the mental health continuum, as access to and funding for MCTs vary significantly within and between U.S. states.

The American Rescue Plan Act (ARPA) of 2021 introduced financial incentives for states to strengthen crisis services through Medicaid to address these challenges (4). ARPA provided an 85% federal match for Medicaid-reimbursed MCTs for the first three years if states met specific eligibility criteria, including staff training, 24/7 services availability, and community linkages (9). As of September 2024, 21 states – including New York, Massachusetts, and North Carolina – had opted into increased Medicaid funding under ARPA. However, little is known about how the implementation of this increased Medicaid funding for MCT has impacted the access to mental health care.

To fill this knowledge gap, I was the principal investigator in another project to explore the perceived impact of implementing these MCTs in New York, Massachusetts, and North Carolina, as well as identifying perceptions of key facilitators and barriers to their implementation. This qualitative research used semi-structured interviews with purposefully sampled stakeholders, including state Medicaid officials and MCT providers. We developed an interview guide informed by the Consolidated Framework for Implementation Research (CFIR), a comprehensive theoretical framework that identifies key domains influencing implementation processes. Participants were recruited from each state and selected for their diverse geographic, sociodemographic, and political contexts. The transcribed interviews were thematically analyzed, guided by CFIR as the theoretical framework.

More broadly, this project addressed a core policy challenge: balancing local autonomy with the need to ensure access to quality services funded at the national level. Policymakers face the ongoing task of finding an adequate level of regulation to reduce unwarranted variations while allowing flexibility for local implementation. The federal structure grants U.S. states considerable autonomy in shaping health policies, resulting in varying crisis response models. While the requirements for increased Medicaid funding may contribute to reduced variations and improved quality in MCTs, achieving 24/7 availability can prove challenging in states with large rural populations. Moreover, reliance on fee-for-service reimbursement through Medicaid may threaten financial sustainability, particularly in areas with lower call volumes and less predictable funding (10). Striking the right balance between local autonomy and national regulation is challenging in both the U.S. and Norway, and this project provides valuable insights for addressing it.

The findings will be disseminated through high-impact journal publications, including an opinion piece in Milbank Quarterly Opinion (10), and presentations at universities, conferences, and policy forums in the U.S. and Norway. Additionally, future research will build on these findings through a comprehensive mixed-methods implementation science project.

Lessons from the Harkness Fellowship

The Harkness Fellowship has truely broadened my perspectives. By engaging with other Fellows and participating in Harkness seminars, I have gained new insights into various issues, including health disparities and effective leadership. Through my mentors and colleagues, I have had the opportunity to collaborate with different research groups on several projects. Their ability to navigate diverse fields, continuously explore new research avenues guided by data, and apply cutting-edge methods has been truly inspiring. I have also learned valuable leadership lessons from their ability to create well-functioning teams by building strong relationships, delegating responsibilities strategically, and playing to the strengths of individual team members. I have applied these lessons in practice when mentoring three Master of Public Health students in the MCT project. I have also been struck by the more informal and less hierarchical mentorship culture in the U.S., which I aim to foster in future leadership roles.

One of my goals as a Fellow was to expand my research expertise. Being immersed in rich academic ecosystems has allowed me to connect and collaborate with leading health policy experts, equipping me with new research methods and strengthening my interdisciplinary approach. For example, I led another project analyzing care patterns for Medicare enrollees with bipolar disorder, focusing on how telemedicine is integrated into outpatient therapy, evaluations, and management. Using Medicare claims data from 2022 to 2024, we categorized patients based on their mental health specialists' use of in-person care and telemedicine. Quality outcome measures included emergency department visits, hospitalizations, outpatient follow-up, and medication adherence. This project aimed to provide key insights for policymakers into the relationship between telemedicine use and quality of care, and findings will be disseminated via high-impact journal publications and presentations.

Living and working in the United States has prompted reflections on Norway's society and health care system. The diversity in demographics and viewpoints I encountered daily reflected the complexity of U.S. history and culture. A nation's health care system often mirrors its broader societal structures: the fragmented U.S. system reflects deep political and economic divisions, whereas Norway's universal coverage model is shaped by a more homogeneous and consensus-driven society. However, fragmentation in the U.S. varies by state. Massachusetts, for example, has coverage rates comparable to those of countries with universal health care. Understanding the vast scale of the U.S. has helped me grasp its health policy landscape. Just as Brussels can feel distant to many Europeans, federal policies from Washington may seem remote to many Americans. In the uncertainty of the current political climate, the foundations of U.S. federalism are being tested.

On a personal level, experiencing the disparities in health care access and outcomes in the United States has been another important lesson. A limited public safety net leaves many vulnerable populations without adequate care. For example, it is heartbreaking to witness individuals with severe mental illness struggling in inner cities while world-class health care exists blocks away. Although the U.S. has a well-developed discourse on disparities, translating awareness into systemic change and improved outcomes remains a fundamental challenge. The true measure of a nation is how it treats its most vulnerable. Experiencing these disparities firsthand has strengthened my conviction that robust safety nets and a publicly funded health care system are essential to ensuring access for all.

Reflections on Future Research and Policy Work

In my future career, I want to continue working at the intersection of research and health leadership. As Head of the Secretariat in the government Committee on Decision-Making Capacity, I drew on my clinical, legal, and academic expertise to navigate complex legal frameworks and translate research findings into actionable policy recommendations for the Norwegian Ministry of Health and Care Services. This work resulted in a comprehensive report that balanced different perspectives with up-to-date research (2). This hands-on experience deepened my understanding of the complexities of health policy implementation and the importance of close collaboration among stakeholders. I plan to apply these lessons in Norway and internationally, contributing to health policy as a researcher and policymaker. I am particularly passionate about integrating research into policymaking to drive innovation and bridge the fields of medicine, law, and ethics to create lasting, impactful changes in health policy and practice. My previous roles as Senior Advisor at the Norwegian Directorate of Health, litigating lawyer representing the Norwegian state, and Chief Physician in adult psychiatric divisions have given me valuable experience in translating complex legal frameworks into practice and addressing systemic challenges in health care delivery. These experiences and the insights gained through the Harkness Fellowship will continue to shape my future research and policy work.

Literature

1. McConnell KJ, Watson K, Choo E et al. Geographical Variations In Emergency Department Visits For Mental Health Conditions For Medicaid Beneficiaries. *Health Affairs* 2023; 42:172-181. doi: 10.1377/hlthaff.2022.00796.
2. Expert Commission on Decision-Making Capacity. *Bedre beslutninger, bedre behandling* [Better decisions, better treatment] 2023 https://www.regjeringen.no/contentassets/0f3c47e50f144edb99f475e358d7126b/no/pdfs/rapport_bedre_beslutninger_bedre_behandling.pdf. (9.5.2025)
3. Sparer MS. Federalism And The ACA: Lessons For The 2020 Health Policy Debate. *Health Affairs* 2020; 39:487-493. doi: 10.1377/hlthaff.2019.01366..
4. Burns A, Menachemi N, Mazurenko O et al. State Policies Associated with Availability of Mobile Crisis Teams. *Adm Policy Ment Health* 2024. doi: 10.1007/s10488-024-01368-0
5. Becevic M, Mehrotra A. Editorial: Telehealth and connected health: equity and access to care. *Front Digit Health* 2024: 6:1399325. doi: 0.3389/fdgth.2024.1399325
6. Wilcock AD, Huskamp HA, Busch AB et al. Use of Telemedicine and Quality of Care Among Medicare Enrollees With Serious Mental Illness. *JAMA Health Forum* 2023:e233648.
7. Vakkalanka JP, Gadag K, Lavin L et al. Telehealth Use and Health Equity for Mental Health and Substance Use Disorder During the COVID-19 Pandemic: A Systematic Review. *Telemedicine and e-Health* 2024:1205-1220.
8. Balfour ME, Goldman ML. Crisis and Emergency Services. In: Sowers W, McQuistion HL, Ranz JM et al eds.*Textbook of Community Psychiatry*. 2 ed. Cham, Switzerland: Springer; 2022: 369-382.
9. Odes R, Looper P, Manjanatha D. Mobile Crisis Teams' Implementation in the Context of new Medicaid Funding Opportunities: Results from a National Survey. *Community Ment Health J* 2024; 60:1399-1407. doi: 10.1007/s10597-024-01296-1.
10. Anderson A, Jorem J. Mobile Crisis Teams and Medicaid Funding: Advancing Behavioral Health Crisis Response Across the Unites States. *Milbank Quarterly Opinion* 2025. doi: 10.1599/mqop.2025.0401.

Jacob Jorem
jorem@hcp.med.harvard.edu
Department of Health Care Policy
Harvard Medical School
180 Longwood Avenue
Boston, MA 02115, USA

Jacob Jorem is Postdoctoral Research Fellow at Harvard Medical School and Adjunct Associate Research Scientist at Columbia University

The Harkness Fellowships in Health Care Policy and Practice is a prestigious program offered by The Commonwealth Fund in the United States. The program provides mid-career professionals from selected countries with a year-long opportunity to conduct health policy research in the U.S. Its aim is to develop international leaders by fostering comparative research and collaboration across health systems.

Since Norway joined the program in 2010, fourteen Norwegian fellows have completed it, supported by the enduring commitment of the Research Council of Norway. This book conveys the experiences, reflections, and research findings of thirteen Norwegian Harkness fellows.

The front-page photo shows Edward S. Harkness House, located at the northeastern corner of Fifth Avenue and 75th Street on the Upper East Side of Manhattan in New York City. The house was built between 1907 and 1909 for the philanthropist and oil heir Edward Stephen Harkness (1874–1940) and his wife, Mary Harkness (1874–1950). Since 1952, the mansion has served as the headquarters of The Commonwealth Fund. The house is well known to all Harkness fellows and stands as a testament to The Commonwealth Fund's mission to enhance the common good.

The book is edited by Professor Jan Frich and Professor Emeritus Magne Nylenna. Frich was a Harkness Fellow from 2013 to 2014 and has been a member of the Norwegian Selection Committee for the Harkness Fellowship in Health Policy and Practice since 2021. Nylenna is a former director of the Norwegian Knowledge Center for Health Services (2011–2017) and served as Chairman of the Norwegian Selection Committee for the Harkness Fellowship in Health Policy and Practice from 2011 to 2020.

The book is published with financial support from The Commonwealth Fund.

www.dnms.no

ISSN 1893-9651
9 771893 965004

ISBN 978-82-92871-70-6
9 788292 871706